



PDPU

**PANDIT
DEENDAYAL
PETROLEUM
UNIVERSITY**

**BUILDING
INTELLECTUAL
CAPITAL**

NAAC Accredited 'A' Grade

**The Annual Quality Assurance Report (AQAR)
Year: 2017-18**

**Knowledge Corridor, Raisan
Gandhinagar - 382 007
Phone No.: + 079-23275060
www.pdpu.ac.in**

Period: July 01, 2017 to June 30, 2018

1. Name of the Institution: Pandit Deendayal Petroleum University

- Name of the Head of the institution : **Dr. C. Gopalkrishnan**
- Designation: Director General
- Does the institution function from own campus: Yes
- Phone no./Alternate phone no.: 079-23275007/44/14
- Mobile no. 9426383008
- Registered Email registrar@pdp.ac.in
- Alternate Email Roshni.solanki@pdp.ac.in
- Address : Knowledge Corridor, Raisan
- City/Town : Gandhinagar
- State/UT : Gujarat
- Pin Code : 382007

2. Institutional status:

- University: ~~State/Central/Deemed~~/Private: Private
(Tick appropriate)
- Type of Institution: Co-education/~~Men/Women~~: Co-education
- Location : ~~Rural/Semi-urban~~/Urban: Urban
- Financial Status: ~~Centrally funded/state funded~~/Private: Private
(please specify)
- Name of the IQAC Co-ordinator/Director: Dr. Rajesh Patel & Dr. D. Sriram
- Phone no. /Alternate phone no. : 079-23275494
- Mobile: 9687848535
- IQAC e-mail address: Rajesh.Patel@sot.pdp.ac.in
- Alternate Email address: Sriram.D@sls.pdp.ac.in

3. Website address: www.pdp.ac.in

Web-link of the AQAR: (Previous Academic Year):

<http://www.pdp.ac.in/naac-Accreditation.html>

4. Whether Academic Calendar prepared during the year?

Yes/No....., if yes, whether it is uploaded in the Institutional website: Yes

Weblink: SPT/SoT:

<http://spt.pdpu.ac.in/downloads/Odd%20and%20even%20semester%20FoET%20calendar.pdf>

SPM: <http://spm.pdpu.ac.in/academics.html>

SLS: <http://sls.pdpu.ac.in/academics.html>

5. Accreditation Details

Cycle	Grade	CGPA	Year of Accreditation	Validity Period
1 st	A	3.39/4.00	2016	from: 16 December 2016 to: 15 December 2021
2 nd				from: to:
3 rd				from: to:
4 th				from: to:
5 th				from: to:

6. Date of Establishment of IQAC: 05/09/2012

7. Internal Quality Assurance System

7.1 Quality initiatives by IQAC during the year for promoting quality culture		
Item /Title of the quality initiative by IQAC	Date & duration	Number of participants/beneficiaries
<ul style="list-style-type: none"> • <i>Regular meeting of Internal Quality Assurance Cell (IQAC); timely submission of Annual Quality Assurance Report (AQAR) to NAAC; Feedback from all stakeholders</i> • <i>Participation in NIRF</i> • <i>NBA</i> • <i>10% in each course is being taught by industry professional</i> • <i>Capsule courses</i> • <i>Research Encouragement and patenting</i> 	July 2017 to June 2018	13 of committee IQAC & benefited to entire University

8. Provide the list of Special Status conferred by Central/ State Government- UGC/CSIR/DST/DBT/ICMR/TEQIP/World Bank/CPE of UGC etc.

Institution/ Department/Faculty	Scheme	Funding agency	Year of award with duration	Amount
Graded Autonomy	By MHRD	---	2018	---
Ministry of Finance	Recognition under 35(1)(ii) of Income Tax Act, SIRO recognition and Concessional GST rate	---	Perpetual approval	---

9. Whether composition of IQAC as per latest NAAC guidelines: Yes/No: Yes

*upload latest notification of formation of IQAC

10. No. of IQAC meetings held during the year: 03

The minutes of IQAC meeting and compliance to the decisions have been uploaded on the website. Yes

Three IQAC meeting held during the year 2017-18

- MOM-1 25/8/2017 (2017-18/M1)
- MOM-2 24/11/2017 (2017-18/M2)
- MOM-3 23/2/2018 (2017-18/M3)

(Please upload, minutes of meetings and action taken report)

11. Whether IQAC received funding from any of the funding agency to support its activities during the year? ~~Yes~~ No ✓

12. Significant contributions made by IQAC during the current year (maximum five bullets)

- Developed Effective Monitoring of Evaluation System.
- To apply for NBA to Deptt. of Mech. Engg., to AICTE.
- Ways for improving ranking in NIRF.
- Feedback from the stakeholders.

13. Plan of action chalked out by the IQAC in the beginning of the Academic year towards Quality Enhancement and the outcome achieved by the end of the Academic year

Plan of Action	Achievements/Outcomes
To augment infrastructure facilities	The Finance Committee approved for construction of a new Academic Block, and subsequently the process for its tendering had been undertaken.
To examine the option of departmentalization at SLS.	Following departments have been created at SLS: 1. Department of Languages, Literature & Aesthetics 2. Department of Social Sciences 3. Department of Business Administration and Commerce
To examine nomination of HoD by rotation.	The detailed procedure has been worked out for nomination of HoD by rotation from among middle/senior level faculty of the respective department. Accordingly, new HoDs have been nominated in the respective departments.
To decide regular intervals of IQAC meetings.	IQAC meetings have got scheduled in every quarter of the year starting from the month of November.

14. Whether the AQAR was placed before statutory body? Yes

Name of the statutory body: In Academic council Date of meeting(s): 30/10/2018

15. Whether NAAC/or any other accredited body(s) visited IQAC or interacted with it to Assess the functioning? No

16. Whether institutional data submitted to AISHE: Yes

Year: 2017-18 Date of Submission: January 2018

17. Does the Institution have Management Information System? Yes ✓

If yes, give a brief description and a list of modules currently operational.
(Maximum 500 words)

Key issues related to Management System Development, Implementation and Continuous Improvement are discussed and appropriate decisions are taken at the meetings of the Statutory Bodies. The Board of Governors (BoG) and Finance Committee (FC) deliberated on the developmental strategies of the University and guide on all broad areas of development and internal quality enhancement.

Research Advisory Board contributes with critical inputs and new ideas for research & development and incorporating cutting edge research in the framing/updating of curricula. The Office of Planning and Development looks in to the emerging areas of knowledge and research and provides inputs for the development and implementation of new projects.

BoG has constituted a Standing Committee to oversee, guide and support the university in policy implementation.

To achieve the goals of providing excellent education and training, discussions are regularly held among Dean and Directors with the DG, to review on action taken and future planning.

Guidance of the leadership helps in obtaining the resources and judiciously utilizing and using all resources at optimum level. The resources requirements are built in to the budgets and the same are proposed to the Finance Committee Meeting. Academic issues are taken up in the meetings of Academic Council. There are also support offices like Office of International Relations, Office of Research & Sponsored Projects, and Placement services.

PART-B

CRITERION I–CURRICULAR ASPECTS

1.1 Curriculum Design and Development

1.1.1 Programmes for which syllabus revision was carried out during the Academic year

Name of Programme	Programme Code	Dates of Revision
B. Tech (Petroleum Engineering)		From academic year 2017-18 Vide Minutes of 13 th meeting of Academic Council dated 13 th September 2017
B. Tech (Civil Engineering)		
B. Tech (Chemical Engineering)		
B. Tech (Electrical Engineering)		
B. Tech (Mechanical Engineering)		
B. Tech (Industrial Engineering)		
B. Tech (Computer Engineering)		
B. Tech (Information & Communication Technology)		
M. Tech (Petroleum Engineering)		
M. Tech (Chemical Engineering)		
M. Tech (Nuclear Science & Technology)		
M. Tech (Environmental Engineering)		
M. Tech (Electrical Engineering)		
M. Tech (Mechanical Engineering - Thermal)		
M. Tech Energy Systems (Focused on Solar energy)		
MBA (E&I)		25th June 2018
MBA (General Management)		
PGDPMX		

1.1.2 Programmes/ courses focussed on employability/ entrepreneurship/ skill development during the Academic year

Programme with Code	Course with Code	Date of Introduction
B. Tech (Petroleum Engineering)	Climate Change -17PEB341	2007
	Entrepreneurship17PEB342	
	Computational fluid dynamics -17PEB343	
	Manufacturing technology for Petroleum Engineers - 17PEB344	
	Total Quality management -17PEB345	
	Research Methodology - 17PEB346	
	Petroleum Offshore Operations -17PEB347	
	Material Technology - 17PEB348	
	Fluidization Engineering -17PEB349	
	Polymer Technology -17PEB350	
	Coal Bed Methane -17PEB351	
B. Tech (Petroleum engineering)	Physics –Semester I - 17PEB103	2007
	Geology for Petroleum Engineers Semester I - 17PEB104	
	Energy and Environmental Studies Semester I -	

	17PEB105	
	Physics Practical Semester I	
	Geology for Petroleum Engineers Practical Semester I	
	Chemistry, Semester II	
	Sedimentary and Petroleum Geology: Semester II	
	Fluid Mechanics, Semester II	
	Chemistry Practical, Semester II	
	Sedimentary and Petroleum Geology Practical, Semester II	
	Applied Physics, Semester III	
	Thermodynamics, Semester III	
	Geomechanics and Strength of Materials, Semester III	
	Petroleum Exploration, Semester III	
	Heat and Mass transfer Practical, Semester III	
	Geomechanics and Strength of Materials Practical, Semester III	
	Numerical Methods, Semester IV	
	Drilling Engineering I, Semester IV	
	Reservoir Engineering, Semester IV	
	Transport Phenomena, Semester IV	
	Drilling Engineering Practical, Semester IV	
	Numerical Methods Practical, Semester IV	
	To Rename the course Well Logging and Formation Evaluation, Semester V	
	Production Engineering I, Semester V	
	Petroleum Refinery Engineering, Semester V	
	Unconventional Hydrocarbon Energy Resources Group Assignment and Presentation, Semester V	
	Petroleum Engineering-I Practical, Semester V	
	Well Test Analysis, Semester VI	
	Surface Production Operation - Semester VI	
	Reservoir Modelling and Simulation, Semester VI	
	Drilling Engineering II, Semester VI	
	Process Equipment, Semester VI	
	Production Engineering II, Semester VII	
	Integrated Reservoir Management, Semester VII	
	Hydrocarbon Contracts and Asset Management, Semester VIII	
	Health Safety and Environment - Semester VIII	
B.Tech (Civil Engineering)	Applied Mechanics, Semester I&II	2010
	Applied Mechanics Lab, Semester I&II	
	Elements of Civil Engineering, Semester I&II	
	Engineering Geology, Semester III	
	Fluid Mechanics I, Semester III	
	Surveying, Semester III	
	Surveying Lab, Semester III	
	Theory of structure I, Semester IV	
Fluid Mechanics –II, Semester IV		

	Engineering Geology, Semester IV	
	Fluid Mechanics I & II Lab, Semester IV	
	Concrete Technology Lab, Semester IV	
	Environmental Engineering-I, Semester V	
	Semesterinar, Semester VII	
B. Tech (Chemical Engineering)	Chemical Engineering Thermodynamics I & II, Semester III&IV	2011
	Mechanical Unit Operations, Semester III&IV	
	CH205T and CH207 T inter-change of the subject Heat Transfer (now elements of Heat transfer) with Mechanical Unit Operations between 3rd and 4th Semester, Semester III&IV	
B. Tech. (Electrical Engineering)	EE 204T :ElectroMechanical Energy Conversion I, Semester III	2010
	EE 205T: Electrical and Electronics Engineering Materials, Semester III	
	EE 203T: Electronics Devices and Circuits Lab, Semester III	
	EE 208P: Control Theory Lab. Semester IV	
	EE 211T :Electromechanical Energy Conversion II, Semester IV	
	EE 209T: Communication Engineering, Semester IV	
B. Tech. Mechanical Engg. & Industrial Engg	Thermodynamics and Fluid Flow, Semester III	2010
	Fluid Mechanics, Semester III	
	Mechanical Measurements and Metrology Laboratory, Semester III	
	Fluid Machinery, Semester IV	
	Fluid mechanics andFluid machinery, Semester IV	
	Kinematics of machine elements Lab, Semester IV	
	Design of Machine Elements Lab, Semester IV	
	Manufacturing Process-1 Laboratory, Semester IV	
M.Tech (Petroleum engineering)	Petroleum Formation Evaluation, Semester I	2010
	Advanced Process Dynamics and Control, Semester II	
M. Tech Nuclear Science & technology	Introduction to Nuclear Engineering (NE501) Semester I	2009
	Nuclear Materials (NE502), Semester I	
	Introduction to Plasma Physics and Tokamaks (NE505), Semester I	
	Nuclear Reactor Analysis (NE506) Deletion, Semester II	
	Nuclear Power Plant Engineering (NE508)Semester II	
	Nuclear Safety, Security and Safeguards (NE507), Semester II	
	Nuclear Thermal Hydraulics (NE504), Semester II	
	Fusion Reactor Principles and Neutronics	

	(NE510), Semester II Radiation and Radioisotopes applications (NE511), Semester II	
M.Tech (Environmental Engineering)	Water Treatment and Supply Systems EN503, Semester I	2015
	Advanced Environmental Engineering Laboratory EN505, Semester I	
	Geographic Information System EN507, Semester I	
	Solid and Hazardous Waste Management EN 510, Semester II	
	Sewage treatment & Disposal System EN 511, Semester II	
	Industrial Wastewater Management EN 512, Semester II	
M. Tech. Electrical Engg.(Power Systems)	EE 509: Advanced Digital Signal Processing, Semester II	2013
Comprehensive project (CP)	CP was introduced for all UG courses to horn the skills & enhance the employability of students. Note attached	
Industrial training – Internshala	Industrial Training through Internshala Note attached	
M. Tech –all	Measures for enhancing the Excellence value of M. Tech. programme- Note attached	

1.2 Academic Flexibility

1.2.1 New programmes/courses introduced during the Academic year

Programme		Date of introduction
M.Tech Mechanical (Design)		2013
Post Graduate Programme in General Management-Executive (PGDGM-X)		2018
Course(s)		Date of introduction
B. Tech. (Petroleum Engineering)	Engineering Drawing Semester I	2007
	Surveying – Semester II	
	Heat and Mass transfer Semester III	
	Programming Languages : Python, Semester IV	
	Process Dynamics and Control- Semester V	
	Introduction to Petroleum Software Semester V	
	Process Dynamics and Control Practical Semester V	
B. Tech.(Civil Engineering)	Elements of Civil Engineering and Mechanics (3-1-0)4 UCE101T Semester 1&2	2010
	Strength of Materials (3-1-0)4 Semester III	
	Material Testing Lab (0-0-3)1.5 Semester -III	
	Semesterinar Semester VII	
	Extensive Survey Project (0-0-0)1 Semester VII	
B. Tech.(Chemical Engineering)	Chemical Process Calculation Semester III	2011

M.Tech. (Chemical Engineering)	Interchange between the subject SE505T, 'Renewable Energy & Energy Management' 1st Semester and CH 507 Advanced Process Synthesis, 2nd Semester	2016
M.Tech. (Nuclear Science and Technology)	Introduction to Nuclear Physics and Engineering Semester I	2009
	Nuclear Materials and manufacturing technology Semester I	
	Nuclear Reactor Engineering Semester II	
	Nuclear and Industrial Safety Semester II	
M.Tech.(Environmental Engg.)	'Transport of Pollutants in Natural Systems' Elective-II) EN 517 (To assign new course code) Semester II	2015
B. Tech. (Mechanical Engg. & Industrial Engg.)	Thermodynamics, Fluid Flow and strength of Material lab Semester III	2010
	Electrical Technology and Control System-Theory & Practical Semester III	
	Design of Machine elements and Kinematics of machines with industrial drafting Semester IV	
	Fluid mechanics and fluid machinery lab Semester IV	
M.Tech. Energy Systems (Focused on Solar Energy)	Galvanic Energy Storage SE 513 Addition of topic, 'hybrid solution' in Galvanic Energy Storage course Semester II	2009
	Photovoltaic Power Plant Engg. SE 515 Addition of topic certification and BOM (bill of materials) Semester II	
B.Tech. (Computer Engg.) & B.Tech. (Information & Communication Technology)	MA 206 T- Discrete Mathematics Addition: Concept of set theory in first unit. Growth of functions, Pigeon-hole principle and counting. Deletion: In the third unit, quotient groups and integral domains	2016

1.2.2 Programmes in which Choice Based Credit System (CBCS)/Elective Course System implemented at the University level during the Academic year.

Name of Programmes adopting CBCS	Date of implementation of CBCS / Elective Course System		UG	PG
	UG	PG		
M.B.A. (Energy and Infrastructure Management)		√	2015	
M.B.A. (General Management) Specialization in		√	2015	
• Financial Management				
• Marketing Management				
• Operations Management				
• Human Resources Management				
PGDPM-X		√		

B.Tech. (Petroleum Engg.)	√		2015		
B.Tech. (Civil Engg.)	√		2015		
B.Tech. (Mechanical Engg.)	√		2015		
B.Tech. (Electrical Engg.)	√		2015		
B.Tech. (Chemical Engg.)	√		2015		
B.Tech. (Industrial Engg.)	√		2015		
B. Tech. (Computer Engg.)	√		2015		
B. Tech. (Information & Communication Technology)	√		2015		
M. Tech. (Civil Engg. (Infrastructure Engg. & Mgt.))		√			
M. Tech. (Mechanical Engg. (Thermal))		√			
M. Tech. (Electrical Engg. (Power Systems))		√			
M. Tech. (Petroleum Engg.)		√			
M. Tech. (Energy Systems (Focused on Solar Energy))		√			
M. Tech. (Environmental Engg.)		√			
M. Tech. (Chemical Engg.)		√			
B.A. (Hons.) / B.B.A. (Hons.)	√				
B.Com. (Hons.)	√				
B.Sc. (Hons.)	√				
M. A. (English)		√			
M. A. (Public Administration)		√			
M. A. (Political Science-International Relations)		√			

1.3 Curriculum Enrichment

1.3.1 Value-added courses imparting transferable and life skills offered during the year

Value added courses	Date of introduction	Number of students enrolled
Independent Study Project I&II	25th June, 2018	15
Comprehensive Project	1 st January 2018	277
B. Tech. Comprehensive Project – National Productivity council	1 st January 2018	41
GATE Coaching (In house)	7 th January, 2017	150

1.3.2 Field Projects / Internships under taken during the year

Project/Programme Title	No. of students enrolled for Field Projects / Internships
Rural Internship	737
Industrial Orientation	688
Industrial Training	845

National Cadet Corps (NCC)	100
B. Tech. Comprehensive Project – National Productivity council	41
B. Tech. Comprehensive Project – Industry	277
Photovoltaic company internship	12
Maintenance of Transformers	2
Design, Manufacturing & Testing of Circuit Breaker	3
Designing of Power Circuit for automatic transfer switch control panel for 3-Phase Induction Motor	2
2.250W, Solar Charge Controller Using PWM Method	3
Designing of Power Circuit for automatic transfer switch control panel for 3-Phase Induction Motor	2
Design and study of the overall circuit of automatic transfer switch control for 3-phase induction motor according to the requirement.	2
Design of submersible pump according to motor rating.	1
Designing of the rectifier in the industrial UPS	1
Implementation of 3-Phase, 3kW, Grid Tied Solar Inverter	1
Economization of solar power plant using wind power.	1
Designing of an inverter in the industrial UPS.	1
Thermal Loading Monitoring of Distribution Transformer using Hotspot Temperature Evaluation	2
Electric & Magnetic Field Produced by 400kV Double Circuit Overhead Line – Measurement & Calculations in Real Lines and Line Models	2
Design, logic development and testing of power and control panels.	3
Fly back converter using planar magnetics and optcoupler based feedback controller.	1
Manufacturing of different types of control panels.	1
Manitenance of automatic transfer switch control panel for three-phase induction motor.	1
Voltage Stability Analysis of Power System Using Optimization Techniques (PSO)	1
Design of stator in submersible pump.	1
Designing of power circuit for automatic transfer switch control panel for 3-phase induction motor.	1
Maintenance of transformers.	1
Solar rooftop plant installation.	1
Electric cashew shorting machine and intelligent power electronics controller with ANN bridging compatibility for autonomous driving electric cart.	1
Solar construction productivity norms.	1
Close loop control system using process instrumentation.	1
Development of Drive for Synchronous Reluctance Motor	2
Preventive maintenance technique for electric locomotive and their various components.	1
Design of rotor in submersible pump	1
Studies on deactivation and regeneration of CCR naptha reforming catalyst; role of acid precursors	1
New Techniques in wastewater treatment	2
Process optimization of naptha thermal cracking	1
Process improvement for increasing the overall performance of sulphonation industry	3
Assessment of Waste collection and Management Techniques	1
M. Tech (Infrastructure Engg & Mgmt) Metro rail construction project, Nr Sabarmati power plant)	18

Plasma Gasification For Disposing Tyre Waste And Recover Energy (IPR)	01
Cracking Of Hydrocarbon Pollutant Using Dielectric Barrier Discharge Plasma (IPR)	01
Treatment of CETP Wastewater by Electro-fenton based Advance Oxidation Process (CSIR – NEERI)	01
Development of CVT system	05
Nuclear Fuel Fabrication and Fuel bundle assemblies, NFC, Hyderabad	5
Study of different uranium minerals and other rare minerals, AMD, Hyderabad	5
Study of Food irradiation techniques, BARC, Mumbai	4
Hydrogen Pallet injection in fusion application, IPR, Gandhinagar	1
Application of Plasma in industry, FCIPT, Gandhinagar	5

1.4 Feedback System

1.4.1 Whether structured feedback received from all the stakeholders.

1) Students	2) Teachers	3) Employers	4) Alumni	5) Parents
Yes	Yes	Yes	Yes	Yes

1.4.2 How the feedback obtained is being analyzed and utilized for overall development of the institution? (Maximum 500 words)

Structured Feedback from Students.

- It helps the faculty to enhance quality of teaching and understanding ability of students.
- Improving and introducing various teaching methods.
- Improving communication skills and introducing more interactive session.
- Improving Quality and Assessment criteria of teaching and evaluation.

Structured Feedback of Faculty:

- The Appraisal Method helped the University to be more Meritocracy and Transparent.
- It helped to create balance between Teaching and Research.
- Involvement of all faculty members in various administrative activities (Members of various departmental committees and like) helps in departmental growth.

Structured Feedback from Employers:

- Structured feedback form is filled by each employer on regular interval for improving the quality of students and course taught by faculty.

Structured Feedback from Alumni:

- Portal on our website for Alumni Feedback.

CRITERION II -TEACHING-LEARNING AND EVALUATION**2.1 Student Enrolment and Profile**

2.1.1 Demand Ratio during the year

Name of the Programme	Number of seats available	Number of applications received	Students Enrolled
M.B.A	120	348	128
PGDPM-X	30	9	7
Engineering	780	3417	835
B.A./B.Com/ B.B.A/B.Sc.	480	1952	476
M.Tech.	162	351	129
M.A.	60	75	37
Ph. D.	59	194	59

2.2 Catering to Student Diversity

2.2.1. Student - Full time teacher ratio (current year data)

Year	Name of School	Number of students enrolled in the institution (UG)	Number of students enrolled in the institution (PG)	Number of full time teachers available in the institution teaching only UG courses	Number of full time teachers available in the institution teaching only PG courses	Number of teachers teaching both UG and PG courses
2017-18	School of Technology	2564	184	32	15	62
2017-18	School of Petroleum Technology	420	28	16	02	05
2017-18	School of Petroleum Management	--	229	--	12	--
2017-18	School of Liberal Studies	1308	44	20	--	08

2.3 Teaching - Learning Process

2.3.1 Percentage of teachers using ICT for effective teaching with Learning Management Systems (LMS), E-learning resources etc. (current year data)

Name of School	Number of teachers on roll	Number of teachers using ICT (LMS, e-Resources)	ICT tools and resources available	Number of ICT enabled classrooms	Number of smart classrooms	E-resources and techniques used
School of Technology	109	109	KAHOOT, Google	14	-	NPTEL, MOOCS,

			Classroom, CANVAS			E-Journals, CDs
School of Petroleum Technology	21	21	KAHOOT, Google Classroom, CANVAS	06	06	NPTEL, MOOCS, E-Journals, CDs
School of Petroleum Management	12	12	Yes	05	05	Yes
School of Liberal Studies	28	28	Digital Classes, Audio Visual Studio, Kindle readers in the Library, Online Journals and Collection of CDs in library, Computer Lab and language lab resources	11	11	MOOCs, Google Class Room, Ed-Ted, Audio Visual Studio

2.3.2 Students mentoring system available in the institution? Give details. (maximum 500 words)

Counselling offers guidance and support to students at every stage of their college life and helps them to understand any problems or concerns that are affecting their academics and career. It also helps them in planning for short and long-term goals and for job opportunities.

For a group of 20 students, a counsellor is nominated from amongst the faculty for the counselling of the students to help student's matters in Academic Development, Career Development, and Personal/Social Development. The goal of counselling is to help individuals overcome their immediate problems and also to equip them to face future problems. Counselling, to be meaningful has to be specific for each student since it involves his unique problems and expectations.

- Individual/Group Counselling Sessions for variety of problems in sphere of academics, department facilities, university facilities etc.
- To identify the difficulties in the theory and laboratory courses offered.
- To identify the problem related to the industrial training and placement.
- To help the student work out a plan for solving their difficulties.
- To inspire successful endeavour toward attainment.
- To help student to choose right career path for job, higher studies, Entrepreneurship, etc.

The counsellor shall meet twice in a semester for the counselling sessions and records the counselling matter in prescribed format. A brief counselling report addressing major issues shall be submitted to the Head of the Department and/or the Director of the respective school.

Number of students enrolled in the institution	Number of fulltime teachers	Mentor: Mentee Ratio
2748 (School of Technology)	109	1:25
448 (School of Petroleum Technology)	23	1:21
229 (School of Petroleum Management)	12	1:19
1352 (School of Liberal Studies)	28	1:48

2.4 Teacher Profile and Quality

2.4.1 Number of full time teachers appointed during the year

No. of sanctioned positions	No. of filled positions	Vacant positions	Positions filled during the current year	No. of faculty with PhD
17	17	0	17	8

2.4.2 Honours and recognitions received by teachers

(Received awards, recognition, fellowships at State, National, International level from Government, recognised bodies during the year)

Year of award	Name of full time teachers receiving awards from state level, national level, international level	Designation	Name of the award, fellowship, received from Government or recognized bodies
2017	Dr. Vivek K. Patel	Assistant Professor	Recognition as an outstanding reviewer for the Elsevier journals (i) International Journal of thermal sciences (ii) Applied Thermal Engineering
2017	Dr. Vivek K. Patel	Assistant Professor	Editorial Board Member of "Asia-Pacific Journal of Science and Technology" (ISSN:2539-6293) published by the Research and Technology Transfer Affairs Division of Khon Kaen University, Thailand
2017	Ms. Neeta Khurana	Assistant Professor	Received the Global Green Mentor Award 2017 at New York, USA on 22nd September 2017 during the event 'Green School Conference and Awards-2017' organized as part of NYC Climate Week under 72nd Session of United Nations General Assembly(UNGA)
2017	Prof. Pramod Paliwal	Professor	Board of Management, Guru Govind Tribal University, Rajasthan-India by Government of Rajasthan.(January 2018 onwards for a period of 3 years)
2017	Dr. Nishant Doshi	Assistant Professor	Young Faculty in Engineering of Venus Foundation, Chennai
2017	Dr. Samir B. Patel	Assistant Professor	Vice Chairman of Computer Society of India, Ahmedabad Chapter
2017	Dr. Samir B. Patel	Assistant Professor	Technical Committee member of 32nd National convention of Computer Engineers Theme "Application of IT in Rural Development" dated 24th and 25th Feb. 2018.

2017	Dr Pravin Kodgire	Associate Professor	External Expert of Board of Studies, Institute of Advanced Research, Puri foundation, Gandhinagar
2017	Dr. Samir B. Patel	Assistant Professor	BOS Member of Birla Vishwakarma Mahavidhyalaya, Vallabh Vidyanag Nagar
2017	Dr. Tejaskumar Thaker & Mr. Akshay Jain	Assistant Professor & Lecturer	Project Fund Award, Awarded with Licenses, Total value of \$2160.00, CHI University Grant Program, Ontario, Canada (2017)
2017	Dr.M.B.Kiran	Associate Professor	Member on the panel of Examiners-Gujarat Technological University
2017	Dr.M.B.Kiran	Associate Professor	Best paper award in - The 8th International Conference on Mechanical and Aerospace Engineering, (ICMAE 2017). Prague, Czech Republic, 22-25 July 2017
2017	Dr. Rajib Bandyopadhyay	Professor	Appointed by Gujarat Forensic Science University (GFSU) as Expert Member for Research Progress Committee (RPC) of PhD students
2017	Dr. Rajib Bandyopadhyay	Professor	Recognized as a Schedule-I Environmental Auditor by Gujarat Pollution Control Board (GPCB)
2017	Dr. Rajib Bandyopadhyay	Professor & HoD	Received Certificate of Reviewing in recognition of the review made for the journal 'Catalysis Communications', Elsevier Publication.
2017	Dr. Manoj Pandey	Associate Professor	Recognized as a Schedule-I Environmental Auditor by Gujarat Pollution Control Board (GPCB)
2017	Manoj Kumar	Associate professor	INSA fellowship
2017	Dr. Rohit Srivastava	Associate Professor	Best paper award at 2 nd International conference on Chemical Industry, PDPU, 2017.
2017	Prof Anirbid Sircar	Professor	Mentor of SPE-Outstanding student chapter
2017	Dr. P. Sivakumar	Assistant Professor	Young Scientist (National), Venus International Foundation.
2017	Dr. P. Sivakumar	Assistant Professor	Innovative Technological Research & Dedicated Teaching Professional Award (International), Society of Engineers and Technicians, KL, Malaysia
2017	Dr. Uttam K. Bhui	Associate Professor	Summit Level Student Chapter Faculty mentor Award by Society of Exploration Geophysicist.
2018	Dr. Nirav Patel	Assistant Professor	IIW Young Engineer Won 3 rd Price of IIW Young Engineer Competition for Paper titled as "Development and Analysis on

			dissimilar cooling assisted hybrid friction stir welding: Numerical and Experimental aspects
2018	Surendra Singh Kachhwaha	Professor	Chair Professor Suzlon
2018	Prof. Pramod Paliwal	Professor	Member-Governing Council of Faculty of Management and Faculty of Social Sciences & Humanities of Ganpat University, Mehsana-Gujarat
2018	Dr. Uttam K. Bhui	Associate Professor	Summit Level Student Chapter Faculty mentor Award by Society of Exploration Geophysicist.
2018	Dr. Samir B. Patel	Associate Professor	Chairman of Computer Society of India, Ahmedabad Chapter
2018	D. Sarkar	Assoc. Professor	Best Paper Award from World Academy of Science & Technology, Berlin, Germany
2018	Dr. Tejaskumar Thaker	Assistant Professor	Best Paper Award for at National Conference of Recent Trends and Development of Civil Engineering, 16th February, 2018, SVBIT, Gandhinagar
2018	Dr. M.B. Kiran	Associate Professor	Best paper award -paper at International Conference – “Emerging Technologies in Mechanical Engineering (ETME 2018)”, hosted by the Korean Society of Mechanical Engineers (KSME), the Chinese Mechanical Engineering Society (CMES) and the Japan Society of Mechanical Engineers (JSME), held at (Jeju, Korea) from August 19th to August 22nd, 2018
2018	Dr.M.B.Kiran	Associate Professor	Member on the panel of reviewers-University Journal of Business and Management Studies'
2018	Dr.M.B.Kiran	Associate Professor	Member on the panel of Examiners-Visvesvaraya Technological University
2018	Dr. Anirban Das	Associate Professor	Bharat Vikas Award by Institute of Self Reliance, Bhubaneswar
2018	Dr. Rohit Srivastava	Associate Professor	Best Paper award at 'The 3 rd International Conference on Natural Science and Applied Mathematics', Czech Technical University, Prague, June 15-18, 2018
2018	Dr. Rohit Srivastava	Associate Professor	Best paper award at XXXII Gujarat Science Congress, Bhavnagar, Gujarat, 2018.

2.5 Evaluation Process and Reforms

2.5.1 Number of days from the date of semester-end/ year- end examination till the declaration of results during the year

Programme Name	Programme Code	Semester/ year	Last date of the last semester-end/ year-end examination	Date of declaration of results of semester-end/ year- end examination
MBA	--	Trimester	24 March 2018	23 April 2018
Engineering	--	Semester	14 May 2018 onwards	11 June 2018
B.A./B.Com./ B.B.A./B.Sc.	--	Semester	14 May 2018 onwards	8 June 2018

2.5.2 Average percentage of Student complaints/grievances about evaluation against total number appeared in the examinations during the year

**Do not include re-evaluation/ re-totalling*

Department/School	Number of complaints or grievances about evaluation	Total number of students appeared in the examination (End Exam May-2018)	Percentage
School of Petroleum Management	00	238	0.0
School of Petroleum Technology		572	
School of Technology	05	2438	0.7
School of Liberal Studies	00	1335	0.0

2.6 Student Performance and Learning Outcomes

2.6.1 Program outcomes, program specific outcomes and course outcomes for all programs offered by the institution are stated and displayed in website of the institution (to provide the weblink)

As per Annexure A

2.6.2 Pass percentage of students

Programme Code	Programme name	Number of students appeared in the final year examination	Number of students passed in final Semester /year examination	Pass Percentage
	B.Tech. (Petro. Engg.)	133	131	98.50
	B.Tech. (Civil Engg.)	136	128	94.12
	B.Tech.(Mech. Engg.)	128	124	96.88
	B.Tech. (Elect. Engg.)	99	97	97.98
	B.Tech. (Chem. Engg.)	55	53	96.36
	B.Tech. (Ind. Engg.)	54	53	98.15
	M.Tech. (Petro. Engg.)	17	16	94.12
	M.Tech. (Civil)	26	26	100
	M.Tech. (Elect.)	11	10	90.91

	M.Tech. (Mech.)	26	25	96.15
	M.Tech. (Solar Energy)	10	10	100
	M.Tech. (Nuclear Engg.)	5	5	100
	M.Tech.(Env. Engg.)	10	9	90
	M.Tech.(Chem. Engg.)	7	7	100
	B.A./B.B.A.	111	104	93.69
	B.COM.	45	39	86.87
	M.B.A.(E&I)	62	62	100
	M.B.A.(GM)	43	43	100
	PGDPM-X	07	07	100

2.7 Student Satisfaction Survey

2.7.1 Student Satisfaction Survey (SSS) on overall institutional performance (Institution may design the questionnaire) (results and details be provided as weblink)

Students feedback has been taken for 07 different parameters as below.

Sr.	Performance Attribute	Subject Name	
		Faculty name	
1	Communication skills		
2	Subject knowledge		
3	Regularity in conducting classes		
4	Punctuality		
5	Preparedness for lecture		
6	Quality of interaction with students		
7	Fairness in internal assessment		
	Weighted Average (Out of 4.00)		

CRITERION III – RESEARCH, INNOVATIONS AND EXTENSION

3.1 Promotion of Research and Facilities

3.1.1 Teachers awarded National/International fellowship for advanced studies/ research during the year

	Name of the teacher awarded the fellowship	Name of the Award	Date of Award	Awarding Agency
National				
International	Dr. Bhawanisingh G Desai	Indo-Russian Joint Collaborative Research Project	12 th June, 2018	Department of Science and Technology and Russian Federation of Basic Research

3.1.2 Number of JRFs, SRFs, Post-Doctoral Fellows, Research Associates and other fellows in the Institution enrolled during the year

Name of Research fellowship	Duration of fellowship	Funding agency
PhD Research Scholar Fellowship	3 Years	PDPU
JRF (Ms. Nimra Memon)	2 Years	ISRO
JRF	3 Years	DST, SERB
JRF (Ms. Nibedita Pani)	3 Years	DST
JRF(Dr. Anirban Das)	3 Years	DST, Govt. Of India
SRF (Dr. Mayya K.)	3 Years	BRNS
JRF (Dr. Manoj Pandey)	3 years	SERB-DST, Govt. Of India
SAC J.R.F. (Dr. Bhasha)	2 Years and 3 months	SAC, ISRO
SAC J.R.F. (Dr. Poonam Mishra)	2 Years	SAC, ISRO
Research Associate (Mr. Shishir Chandra)	2 Years	Centre of Excellence for Geothermal Energy, Government of Gujarat
Research Assistant (Mr. DharmeshMorabiya)	1 Year	Centre of Excellence for Geothermal Energy, Government of Gujarat
Research Assistant (Mr. Vishal Kumar Balar)	1 Year	Centre of Excellence for Geothermal Energy, Government of Gujarat
Research Assistant (Mr. Kushal Shah)	1 Year	Centre of Excellence for Geothermal Energy, Government of Gujarat
Junior Research Assistant (Mr. VaibhavUmarania)	2 Years	Oil Industry Development Board (OIDB)
Doctoral Fellow (SPT)	4 Year s	Pandit Deendayal Petroleum University
Junior Research Fellow	6 Months	Oil Industry Development Board
SRF(Mr Hardik Vyas)	2 Years	BRNS
SRF (Mr Raghavendra Darji)	2 Years	BRNS
JRF	2 Years	ISRO
Research Associate	3 Years	Suzlon Energy Ltd.
CSIR, Senior Research Fellowship	1 year 9 months	CSIR
University Fellowship	3 Years	PDPU

3.2 Resource Mobilization for Research

3.2.1 Research funds sanctioned and received from various agencies, industry and other organisations

Nature of the Project	Duration	Name of the funding Agency	Total grant Sanctioned (Rs. in Lakh)	Amount received during the year (Rs. in Lakh)
Major projects	2 Years	ISRO	14.00	8.00
	1 Year	MES, DST	44.00	37.00
	3 Years	DST, SERB	21.66	12.10
	3 Years	DST	20.60	8.00
	3 Years	DST, Govt. Of India	38.60	12.10
	3 Years	SERB-DST, Govt. Of India	64.07	17.00
	3 Years	Water Innovation Centre DST, Govt. Of India	Approved	
	3 Years	DST	20.70	10.00
	3 Years	BRNS	27.00	10.64
	3 Years	MoES	54.00 (Approved)	
	2 Years and 3 months	SAC, ISRO	12.60	5.50
	2 Years	SAC, ISRO	10.33	4.80
	1 Year	Oil Industry Development Board (OIDB)	15.00	11.00
	2 Years	BRNS	32.50	23.32
	2 Years	BRNS	26.59	17.83
	2 Years	BRNS	16.90	9.74
	2 Years	DRDO	4.48	2.33
	2 Years	ICSSR	5.50	1.38
Minor Projects	1 Year	ICSSR	2.50	0.90
Interdisciplinary Projects				
Industry sponsored Projects	3 Years	GEDA	3.74 Crore	43.00
	1 Year	Carbon Clean Solution Ltd, UK	6.50	6.50
	2 Year	Tikitar Industries, Baroda	7.92	7.92
	1 Year	Arvind Smart Spaces Ltd	1.00	1.00
Projects sponsored by the University	1 Year	PDP SRP/2017/HSBD	1.70	1.70
	1 Year	PDP SRP/2017/CPUB	1.85	1.85
	2 Year	PDP Hari Ganesh	2.00	0.30
	1 Year	PDP SRP/2017/CPUB	1.20	1.20

	1 Year	PDPU Namrata	0.70	0.25
	1 Year	PDPU Madhavan/Silica	0.50	0.10
	1 Year	PDPU Madhavan/CNP	0.45	0.10
	1 Year	PDPU	0.50	0.50
	1 Year	PDPU	1.30	1.30
	1 Year	PDPU	1.81	1.81
	1 Year	PDPU	1.50	1.50
Students Research Projects <i>(other than compulsory by the University)</i>	1 Year	ORSP	4.60	4.50
	1 Year	ORSP	1.45	0.42
	1 Year	PDPU	1.50	1.30
	1 Year	PDPU	2.50	0.60
	1 Year	PDPU	2.30	1.90
	1 Year	PDPU	1.80	0.35
	1 Year	PDPU	1.50	1.48
	1 Year	PDPU	1.50	0.68
	1 Year	ORSP	0.80	0.80
	1 Year	ORSP	1.60	1.60
	1 Year	ORSP	0.70	0.70
	1 Year	ORSP	1.70	1.70
	1 Year	ORSP	4.43	4.43
	1 Year	PDPU	0.40	0.30
	1 year	ORSP, P.D.P.U	2.50	2.50
	1 Year	PDPU, ORSP	1.40	1.40
	1.5 Years	ORSP	4.00	2.00
	1 Year	ORSP	0.10	-
	2 Years	ORSP	2.50	0.25
	1 Year	ORSP ,PDPU Gandhinagar	1.95	0.20
	1.5 Years	PDPU	2.22	2.22
	1 Year	ORSP	1.60	1.60
	1 Year	ORSP	0.70	0.70
1 Year	ORSP	1.10	1.10	
1 Year	ORSP	2.5	2.50	
International Projects	2 Years	DST-RFBR Joint Collaborative Project	24.00	12.00
Any other(Specify)	International Travel Support	Science and Engineering Research Board (SERB), DST under	0.77	0.77
	1 Year	Seismic Site Characterization of Vadodara Region (2018) Funding Agency	2.00	2.00

3.3 Innovation Ecosystem

3.3.1 Workshops/Seminars Conducted on Intellectual Property Rights (IPR) and Industry-Academia Innovative practices during the year

Title of Workshop/Seminar	Name of the Dept.	Date(s)
Recent Advances in Materials Joining and Processing,	Mechanical Engineering	22-24August, 2017
Tie and Dye technique under Pandit Deendayal Birth Centenary Celebrations.	Languages, Literature and Aesthetics	August 26, 2017
Cyber Security	Computer Engineering	2 nd September, 2017
Industry 4.0	Industrial Engineering	7 th September, 2017
Industry to Academia Programme	School of Petroleum Technology	Sept 2017
Recent Advances in Electrical Power Systems	Electrical Engineering	28-29 September, 2017
Industry Connect	School of Petroleum Technology	September, 2017
Arthsamvad-III' on Entrepreneurship and Life-Cycle Wealth Management. Experts.	School of Liberal Studies	5 th October, 2017
Goods and Services Tax	School of Liberal Studies	11 th October, 2017
Global Opportunities and Career Prospects	School of Liberal Studies	27 th October, 2017
Fundamentals of IoT	Computer Engineering	28 th October, 2017
Workshop on Excel – A tool for Statistical Application	Psychology	3 rd November 2017
Big Data Aanalysis	School of Liberal Studies	10 th November, 2017
Creative Writing	Languages, Literature and Aesthetics	14-16 Nov, 2017
Industrial Relations and Labour Laws for students of HR major and minor	School of Liberal Studies	20-21 November, 2017
DataBase Management System	Computer Engineering	28 th November, 2017
Faculty Industry Immersion Programme FIIP 1.0	School of Petroleum Technology	December 2017
Film Fest by Men against Violence and Abuse	Languages, Literature and Aesthetics	10-11 Jan, 2018
Geothermal International Workshop	Centre of Excellence for Geothermal Energy	17 Jan, 2018
Discovery of the molecular essence of the Indian cuisine through data analytics	Computer Engineering	19 th January, 2018
3 rd International Conference on Geothermal Exploration and Exploitation	School of Petroleum Technology	17 th January, 2018
WEB DEVELOPMENT	Computer Engineering	20-21 Jan, 2018
Advanced Chemical Security Workshop	Nuclear and Chemical	22-25 Jan, 2018
Understanding Public Health and scope for Arts students in Public Health	School of Liberal Studies	6 th February, 2018
Panel Discussion for a joint forum on Youth Responsibility towards Green Energy	School of Liberal Studies	8 th February, 2018
International Conference on Energy &	School of Petroleum	15-16 February,

Infrastructure Management	Management	2018
Renewable Energy Technology, Power Quality Enhancement & Electrical Drives	Electrical Engineering	7-8 March, 2018
Modelling and simulation aided computations in Chemical Engineering	Chemical Engineering	16-17 March, 2018
URBAN ENVIRONMENTAL CHALLENGES: Intervention through Education, Research & Policy	Civil Engineering	15-19 March, 2018
Advanced Challenges in VLSI Technology and Design	ICT	23 rd March, 2018
A talk about NextGen, including Chevening (UK's scholarship program), and UK India relations post- Brexit	School of Liberal Studies	27 th March, 2018
Modernity and tradition in epic narrative	IACLSC	15-16 April, 2018
Open House Round table on City Gas Distribution	School of Petroleum Technology	30 th April, 2018
Instrumental Methods of Chemical Analysis: A Skill Development Initiative to Chemical and Pharmaceutical Analysis	Science Department	25-29 June, 2018

3.3.2 Awards for Innovation won by Institution/Teachers/Research scholars/Students during the year

Title of the innovation	Name of the Awardee	Awarding Agency	Date of Award	Category
Best Incubation Centre with IP Culture	PDPU Innovation & Incubation Centre	Intellectual Property Protection Organization	July 10, 2017	Intellectual Property

3.3.3 No. of Incubation centre created, start-ups incubated on campus during the year

Incubation Centre	Name	Sponsored by
PDPU Innovation & Incubation Centre	Mr. Abhinav Kapadia	Government of Gujarat & Pandit Deendayal Petroleum University

Name of the Start-up	Nature of Start-up	Date of commencement
Recycler	Waste Management Civil & Construction	October 01, 2017
WISE Organics	Agriculture	October 01, 2017
Auto Solar	Solar	October 01, 2017
Gravity Star	Energy	October 01, 2017
Smart Scoot Lock	Smart & Shared Mobility	March 01, 2018
India Plast	Waste Management	March 01, 2018
Prebuy.in	e-Commerce	March 01, 2018
Energy Efficient Pressure Cooker	Energy Conversation	June 01, 2018
i-Cube Access Global Pvt. Ltd.	Telecom	June 01, 2018
CVT Bicycle	Smart & Shared Mobility	June 01, 2018
Floating Concrete	Civil & Construction	June 01, 2018

3.4 Research Publications and Awards

3.4.1 Ph. Ds awarded during the year

Name of Department	No of PhD's Awarded
Mechanical Engineering	04
School of Petroleum Engineering	02
Solar Engineering	02
Science Department	01

3.4.2 Research Publications in the Journals notified on UGC website during the year

	Department	No. of Publication	Average Impact Factor, if any
National	Electrical Engineering	5	-
	Civil Engineering	3	-
	Science Department	7	1.4
	School of Petroleum Technology	1	-
	School of Liberal Studies	36	-
International	Mechanical Engineering	21	2.25
	Electrical Engineering	20	3.8
	Computer Engineering	13	1.76075
	Chemical Engineering	10	-
	Civil Engineering	17	3.0
	Industrial Engineering	6	2.2
	Science Department	15	3.285
	Mathematics Department	8	0.9
	School of Petroleum Management	12	-
	School of Petroleum Technology	28	2.0
	Solar Energy	33	14.2

3.4.3 Books and Chapters in edited Volumes / Books published, and papers in National/International Conference Proceedings per Teacher during the year

Publications	No. of publication
Book Chapters	49
Books Published	21
Conference Proceeding (National/International)	158

3.4.4 Patents published/awarded during the year

Patent Details	Patent status Published/ Filed	Patent Number	Date of Award
A Process for Electro deposition of Silicon Nano-Spheres, Indian Patent F.N. TEMP/E-1/16748/2017-MUM dated 10/05/2017.	Published	TEMP/E-1/16748/2017-MUM	13/4/2018
Geothermal Heating and Cooling System	Published	Indian Patent Filed. No.201621037182	(Published: Patent Office Journal No. 36/2017 Dated 08/09/2017,pp.50)
“Smart Domestic Power Scheduling System”	Patent Filed	application number 201721020308- the same is published on page 9385 in http://www.ipindia.nic.in/writereaddata/Portal/IPOJournal/1_2593_1/Part-1.pdf	

3.4.5 Bibliometrics of the publications during the last Academic year based on average citation index in Scopus/ Web of Science or PubMed/ Indian Citation Index

Title of the paper	Name of the author	Title of the journal	Year of publication	Citation Index	Institutional affiliation as mentioned in the publication	Number of citations excluding self-citations
A novel geometric pattern-based approach to maximize power output of a wind farm	Vivek K. Patel	Clean Technologies and Environmental Policy	2017	-	Pandit Deendayal Petroleum University	-
Many-objective optimization of cross-flow plate-fin heat exchanger	Vivek K. Patel	International journal of thermal sciences	2017	-	Pandit Deendayal Petroleum University	12
Thermal design and optimization of fin-and-tube heat exchanger using heat transfer search algorithm	Vivek K. Patel	Thermal Science and Engineering Progress	2017	-	Pandit Deendayal Petroleum University	4
Topology and Size Optimization of Trusses with Static and Dynamic Bounds by Modified Symbiotic Organisms Search	Vivek K. Patel	Journal of Computing in Civil Engineering	2017	-	Pandit Deendayal Petroleum University	14
Layout optimization of a wind farm to maximize the power output using	Jaydeep Patel, Vimal Savsani, Vivek Patel, Rajesh Patel	Journal of Cleaner Production	2017	-	Pandit Deendayal Petroleum University	10

enhanced teaching learning based optimization technique						
Efficient fault diagnosis of ball bearing using ReliefF and Random Forest classifier	V Vakharia, VK Gupta, PK Kankar	Journal of the Brazilian Society of Mechanical Sciences and Engineering	2017	04	PDPU, Gandhinagar and IIITDM Jabalpur	03
Feature extraction and classification of machined component texture images using wavelet and artificial intelligence techniques	Vinay Vakharia, MB Kiran, Neil Jayeshbhai Dave, Uday Kagathara	IEEE Conference	2017	-	PDPU, Gandhinagar	-
Simulation on MPPT based Solar PV stand-alone system	Siddharth Joshi, Vivek Pandya & Astik Dhandhia	Journal of Energy and Management	2017	-	Department of Electrical Engineering, School of Technology, Pandit Deendayal Petroleum University, Gandhinagar, Gujarat, India	-
Static Security Assessment using Binary Class Support Vector Machine	Astik Dhandhia, Vivek Pandya & Siddharth Joshi	Journal of Energy and Management	2017	-	Department of Electrical Engineering, School of Technology, Pandit Deendayal Petroleum University, Gandhinagar, Gujarat, India	-
Long term Sustainability of Nuclear Power in India – Prospects and Challenges	Vipin Shukla, Vivek Pandya, C. Ganguly	Journal of Energy and Management	2017	-	Department of Electrical Engineering, School of Technology, Pandit Deendayal Petroleum University, Gandhinagar, Gujarat, India	-
Model Predictive control of Series Compensation for Transient Stability enhancement of SMIB system	Miyani Piyush, Vivek Pandya & Anil Markana	Journal of Energy and Management -PDPU	2017	-	Department of Electrical Engineering, School of Technology, Pandit Deendayal Petroleum University, Gandhinagar, Gujarat, India	-
Transient case for sub-synchronous resonance study	Sagar Savalia and Vivek Pandya	Journal of Energy and Management -PDPU	2017	-	Department of Electrical Engineering, School of Technology, Pandit Deendayal Petroleum University, Gandhinagar, Gujarat, India	-
Fractal Base Triple	Ganga Prasad	Frequenz	2017	2	PanditDeendayal	-

Band High Gain Monopole Antenna	Pandey				Petroleum University	
Design and Analysis of Low Noise Optimization Amplifier Using Reconfigurable Slotted Patch Antenna	Ganga Prasad Pandey	Wireless Personal Communications	2017	-	PanditDeendayal Petroleum University	-
Reconfigurable Circularly Polarized Capacitive Coupled Microstrip Antenna	Ganga Prasad Pandey	International Journal of Microwave and Wireless Technologies	2017	4	PanditDeendayal Petroleum University	3
11-17GHz Reconfigurable Stacked Power Amplifier Using Matched Slant Microstrip Line for Ku Band Application	Ganga Prasad Pandey	Wireless Personal Communications	2017	1	PanditDeendayal Petroleum University	1
Kinetics of Simultaneous Oxidation of CO-CH ₄ over Pd-K Promoted NiCo ₂ O ₄ / γ -Al ₂ O ₃ Catalyst	Suverna Trivedi & Ram Prasad	The Canadian Journal of Chemical Engineering (Wiley)	2017	1.265	Indian Institute of Technology, BHU, Varanasi	-
Free-standing monolayer films of ordered colloidal particles	<u>Abhishek Yadav</u> and <u>Mahesh Tirumkudulu</u>	Soft Matter	2017	1	IIT Bombay	1
Experimental investigation of in situ transesterification of castor seeds (ricinus communis) for methyl ester production using hybrid reactor	Pravin Kodgire, Kartik Thakkar, Keyur Shah, S.S Kachhwaha, H B Raghavendra,	ACS 254th Annual Meeting, at Washington DC, USA,	2017	SCI	Pandit Deendayal Petroleum University, Gandhinagar	---
Assessment of flood inundation mapping of Surat city by coupled 1D/2D hydrodynamic modeling- A case application of the new HEC-RAS 5	Patel DP, Jorge AR, Srivastava PK, Michaela B and Han D	<i>Natural Hazards, Springer</i>	2017	10	Pandit Deendayal Petroleum University	10
Cost Effective Composite Concrete using Fly Ash and Copper Slag	H R Dhananjaya, and Sunil,	International Journal of Engineering Technology Science and Research	2017	-	PDPUP	-
A software for optimization of fan type stay cable profiles in cable stayed bridges	H.R.Dhananjaya, Somesh Gajera, Rutvi Jogani, Hardik Bhervia	International Journal of Engineering Technology Science and Research	2017	-	PDPUP	-
Arsenic removal by	Nidheesh P. V.	Chemosphere	2017	33	Pandit Deendayal	33

electrocoagulation process: Recent trends and removal mechanism, ,	and T. S. Anantha Singh,				Petroleum University, Gandhinagar, Gujarat	
Review of Seismic Hazard Approaches for Indian Subcontinents	Payal Mehta, T.P.Thaker, and H.B. Raghavendra	Indian Journal of Technical Education	2017	-	Pandit Deendayal Petroleum University	-
Revealing the correlation between charge carrier recombination and extraction in an organic solar cell under varying illumination intensity	Abhishek Sharma, Mihirsinh Chauhan, Vishal Bharti, Manoj Kumar, Suresh Chand, Brijesh Tripathi, J. P. Tiwari	Physical Chemistry Chemical Physics	2017	4	PDPU, Gandhinagar and NPL, New Delhi	3
Photo-induced characteristic study of smallest fullerene fragment, 1,6,7,10-tetramethylfluoranthene as an acceptor	C. Kanth P., J. Patel, M. Chauhan, A. Yusuf, A. Sharma, M. Trivedi, B. Tripathi, J. P. Tiwari, G. Gupta, M. Kumar, M. K. Pandey	New Journal of Chemistry	2017	1	PDPU, Gandhinagar and NPL, New Delhi	1
Simulation of the effect of quantum dot location on a quantum dot p-i-n junction solar cell	C. J. Kant, K. B. K. Mayya	International Journal of Modeling, Simulation, and Scientific Computing	2017	-	World Scientific	-
Preparation, characterization, and post-synthetic modification of layered MCM-22 zeolite precursor	Riddhi Thakkar, Rajib Bandyopadhyay	Journal of Chemical Science	2017	-	SOT, PDPU	-
"Photo-induced characteristic study of the smallest fullerene fragment, 1, 6, 7, 10-tetramethylfluoranthene as an acceptor." <i>New Journal of Chemistry</i> 41, no. 13 (2017): 5836-5845.	Patel, Jessica, Mihirsinh Chauhan, Md Aatif, Abhishek Sharma, Maitrayee U. Trivedi, Brijesh Tripathi, Jai Prakash Tiwari, Govind Gupta, Manoj Kumar, and Manoj Kumar Pandey	New Journal of Chemistry 41, no. 13 (2017): 5836-5845.	2017	-	Department of Science, School of Technology, Pandit Deendayal Petroleum University, Gandhinagar-382007, India	-
Optimal pricing and ordering policies for an integrated inventory model with stock and price sensitive demand	Dr. Poonam Mishra	Dynamics of Continuous, Discrete and Impulsive Systems Series B: Applications and Algorithms	2017	-	Pandit Deendayal Petroleum University, Gandhinagar	-
Competitive	Somdeb Lahiri	Studies in	2017	-	School of Petroleum	-

Equilibrium in Generalized Games: A New Interpretation		Microeconomics			Management (SPM), Pandit Deendayal Petroleum University (PDPU), Gandhinagar,	
A Note on A. D. Taylor's Property of Independence of Irrelevant Alternatives for Voting Rules	Somdeb Lahiri	Studies in Microeconomics	2017	-	School of Petroleum Management (SPM), Pandit Deendayal Petroleum University (PDPU), Gandhinagar,	-
The first record of Late Jurassic megateuthidid belemnites Chuvashiteuthis aenigmatica gen. et sp. nov. from the upper Kimmeridgian of Central Russia	AP Ippolitov, AY Berezin, MA Rogov, BG Desai	Bulletin of Geosciences	2017	-	School of Petroleum Technology, Pandit Deendayal Petroleum University	-
Trace fossils and Ichnofabric analysis of the Aalenian (?) - Lower Bajocian strata of Volgograd region (south of Russian platform)	B Desai, A Ippolitov	Jurassic System of Russia: Problems of stratigraphy and paleogeography. VII all-Russian meeting, V.A. Zakharov, M.A. Rogov, E.V. Shchepetova (eds.)	2017	-	School of Petroleum Technology, Pandit Deendayal Petroleum University	-
Characterization of Crude Oil for Enhanced Oil Recovery: Study with Anionic Surfactant	Kalpajit Hazarika, Rahul Yadav, Subrata Borgohain Gogoi, Uttam K. Bhui	International Journal of Ambient Energy	2017	0.89	School of Petroleum Technology	-
Development of field procedure to predict wax deposition employing statistical analysis of hydrodynamic and thermal wax deposition process data.	Jatin Agarwal, Anirbid Sircar, Subhash Shah	Dew Journal	2017	-	School of Petroleum Technology	-
Strong light absorption capability directed by structured profile of vertical Si nanowires,	H. A. Chaliyawala, A. Ray, R. K. Pati, I. Mukhopadhyay	Opt. Mater.	2017	-	Solar Research and Development Center, Department of Solar Energy, Pandit Deendayal Petroleum University, Raisan, Gandhinagar,	-
Photoelectrocatalytic Sea water splitting using Kirkendall diffusion grown functional Co ₃ O ₄ film,	M. Patel, W-H. Park, A. Ray, J. Kim, and J.H. Lee,	Solar Energy Mater. Solar Cells	2017	-	Solar Research and Development Center, Department of Solar Energy, Pandit Deendayal Petroleum	-

					University, Raisan, Gandhinagar,	
An efficient optimization and comparative analysis of ammonia and methanol heat pipe for satellite application	Vivek K. Patel	Energy conversion and Management	2018	-	Pandit Deendayal Petroleum University	-
Thermal-hydraulic optimization of plate heat exchanger: A multi-objective approach	Vivek K. Patel	International journal of thermal sciences	2018	-	Pandit Deendayal Petroleum University	4
Efficiency, thrust, and fuel consumption optimization of a subsonic/sonic turbojet engine	Vivek K. Patel	Energy	2018	-	Pandit Deendayal Petroleum University	1
Topology optimization of truss subjected to static and dynamic constraints by integrating simulated annealing into passing vehicle search algorithms	Vivek K. Patel	Engineering with Computers	2018	-	Pandit Deendayal Petroleum University	1
Size, shape, and topology optimization of planar and space trusses using mutation-based improved metaheuristics	Vivek K. Patel	Journal of Computational Design and Engineering	2018	-	Pandit Deendayal Petroleum University	2
Truss optimization with natural frequency bounds using improved symbiotic organisms search	Vivek K. Patel	Knowledge-Based Systems	2018	-	Pandit Deendayal Petroleum University	8
Multiobjective thermo-economic and thermodynamics optimization of a plate-fin heat exchanger	Vivek K. Patel	Heat Transfer—Asian Research	2018	-	Pandit Deendayal Petroleum University	1
Tool wear rate prediction using discrete wavelet transform and K-Star algorithm	V Vakharia, S Pandya, P Patel	Life Cycle Reliability and Safety Engineering	2018	-	PDPU, Gandhinagar	-
An analytical investigation of the best stacking sequence of a symmetric laminated composite plate weakened by a hole	NP Patel, DS Sharma,	Mathematics and Mechanics of Solids	2018	-	PDPU, Gandhinagar	2
A Hybrid bVAR-NARX Wind Power Forecasting Model	Leena Heistrene, Poonam Mishra, Makarand	Electric Power Components	2018	-	Department of Electrical Engineering, and	-

Based on Wind and Load Demand Correlation: A Case Study of ERCOT's System from an ISO's Perspective	Lokhande	and Systems			Department of Mathematics, School of Technology, Pandit Deendayal Petroleum University, Gandhinagar, Gujarat, India & Department of Electrical Engg VNIT,Nagpur, Maharastra, India.	
Gain Scheduling Algorithm based Control of Renewable Energy Systems for Hybrid Standalone DC Grid	Siddharth Joshi Vivek Pandya Amit Sant	Iranian Journal of Science and Technology, Transactions of Electrical Engineering, Springer	2018	-	Department of Electrical Engineering, School of Technology, Pandit Deendayal Petroleum University, Gandhinagar, Gujarat, India & School of Engineering, R.K. University, Rajkot, Gujarat, India	33
Power Transmission Capacity Enhancement of EHV AC Double circuit Transmission lines by Increasing Surge Impedance Loading level Considering Corona Loss effect	Dr. Jitendra Jamnani	European Journal of Advances in Engineering and Technology	2018	-	Department of Electrical Engineering, School of Technology, Pandit Deendayal Petroleum University, Gandhinagar, Gujarat, India	-
Analytical Design Optimization of 765 kV Transmission Line Based on Electric and Magnetic Fields for Different Line Configurations	Kaustubh Vyas and Dr J. G. Jamnani	European Journal of Advances in Engineering and Technology	2018	-	Department of Electrical Engineering, School of Technology, Pandit Deendayal Petroleum University, Gandhinagar, Gujarat, India	-
Coordination of SVC and TCSC in Multimachine Power System for Voltage Profile Improvement	Maulik Pandya and Dr J G Jamnani	European Journal of Advances in Engineering and Technology	2018	-	Department of Elect. Engg.,KSVK, Gandhinagar, Gujarat, and Department of Electrical Engineering, School of Technology, Pandit Deendayal Petroleum University, Gandhinagar, Gujarat, India	-
Dynamic Mathematical Modeling of Unified Power Flow Controller Integrated into Single Machine Power System for Dynamic State	Meera Karamta and J. G. Jamnani	European Journal of Advances in Engineering and Technology	2018	-	Department of Electrical Engineering, School of Technology, Pandit Deendayal Petroleum University, Gandhinagar,	-

Estimation					Gujarat, India	
Multi-criterion control of a bioprocess in fed-batch reactor using EKF based economic model predictive control	Markana Anilkumar, Nitin Padhiyar, Kannan Moudgalya	Chemical Engineering Research and Design	2018	3.8	Department of Electrical Engineering, School of Technology, Pandit Deendayal Petroleum University, Gandhinagar, Gujarat, India Department of Chemical Engineering, Indian Institute of Technology Gandhinagar, Gujarat 382355, India Department of Chemical Engineering, Indian Institute of Technology Bombay, Mumbai 400076,	-
Optimal selection of distributed generating units and its placement for voltage stability enhancement and energy loss minimization	Pankita Mehta, Praghnes Bhatt, Vivek Pandya	Ain Shams Engineering Journal- Elsevier	2018	3.13	Department of Electrical Engineering, C.S. Patel Institute of Technology, CHARUSAT, Changa, Gujarat, India & Department of Electrical Engineering, School of Technology, PDPU, Gandhinagar, Gujarat, India	9
Mitigation of HA, BSA and oil/water emulsion fouling of PVDF Ultrafiltration Membranes by SiO ₂ -g-PEGMA nanoparticles	Bharti Saini, Manish Kumar Sinha, S.K.Dash	Journal of Water Process Engineering	2018	4.0 (cite score)	Pandit Deendayal Petroleum University	-
Design of Active NiCo ₂ O _{4-δ} Spinel Catalyst for Abatement of CO-CH ₄ Emissions from CNG Fueled Vehicles	Suverna Trivedi & Ram Prasad	AIChE Journal (Wiley)	2018	3.31	Indian Institute of Technology, BHU, Varanasi	-
Synthesis of K-Pd doped NiCo ₂ O _{4-δ} by reactive calcination route for oxidation of CO-CH ₄ emissions from CNG vehicles	Suverna Trivedi & Ram Prasad	New Journal of Chemistry (RSC)	2018	3.201	Indian Institute of Technology, BHU, Varanasi	-
Equilibrium Solubility and Thermophysical Properties of aqueous blends of 1-	Anirban Dey, S.K.Dash, B.P.Mandal	Fluid Phase Equilibria	2018	2.214	Indian Institute of Technology Guwahati, Pandit Deendayal Petroleum	-

(2-aminoethylpiperazine) and N-Methyldiethanolamine					University	
Selective production of phenols from lignin via microwave pyrolysis using different carbonaceous susceptors	Yerrayya, A.;Suriapparao,D.V.;Natarajan, U.; Vinu, R	Bioresource Technology	2018	5.8	IIT Madras	-
Selective production of phenolics from waste printed circuit boards via microwave assisted pyrolysis	Suriapparao,D.V.;Batchu,S.P.;Jaya surya,S.;Vinu, R	Journal of cleaner production	2018	5.7	IIT Madras	3
Microwave assisted co-pyrolysis of biomasses with polypropylene and polystyrene for high quality bio-oil production	Suriapparao,D.V.;Bhanupriya,B.;Raja,D.;Vinu, R	Fuel processing technology	2018	4.4	IIT Madras	3
Integrated framework for soil and water conservation in Kosi River Basin through soil hydraulic parameters, morphometric analysis and Earth observation dataset	Pradhan RK, Srivastava PK, Maurya S, Singh SK and Patel DP	Geocarto International	2018	01	Pandit Deendayal Petroleum University	01
Advanced oxidation processes based on zero-valent aluminium for treating textile wastewater,	JayrajKhatri,P.V. Nidheesh, T.S.Anantha Singh, M.Suresh Kumar,	Chemical Engineering Journal,	2018	2	Pandit Deendayal Petroleum University, Gandhinagar, Gujarat	2
Review of zero-valent aluminium based water and wastewater treatment methods,	P.V. Nidheesh, Jayraj Khatri, T.S. Anantha Singh, R. Gandhimathi, S.T. Ramesh,	Chemosphere	2018	2	Pandit Deendayal Petroleum University, Gandhinagar, Gujarat	2
Vertical Accuracy Evaluation of SRTM-GL1, GDEM-V2, AW3D30 and CartoDEM-V3.1 of 30m resolution with Dual Frequency GNSS for Lower Tapi Basin India	Akshay Jain, Tejaskumar Thaker, Ashish Chaurasia, Parth Patel and Anupam K. Singh	GeoCarto International	2018	-	Pandit Deendayal Petroleum University	03
Development of Output and Performance Based Road Contract (OPRC) Model for Maintenance and management of	Jay Soni, Tejaskumar Thaker, Rajesh Gujar and Sagar Deshmukh	International Journal of Pure and Applied Research in Engineering and	2018	-	Pandit Deendayal Petroleum University	-

Roads		Technology				
Hybrid Approach for Resource Optimization and Management of Bridge Projects using Bootstrap Technique and Genetic Algorithm	Sarkar, D	International Journal of Construction Management , Taylor & Francis	2018	2	PDPU	2
Strain and layer modulated electronic and optical properties of low dimensional perovskite methylammonium lead iodide: Implications to solar cells,	Narayan N. Som, P.M.W.P. Sampath, Shweta D. Dabhi, VenuMankad, Satyam Shinde, M.L.C. Attygalle, Prafulla K. Jha	Journal of Solar Energy	2018	-	SOT, PDPU	-
Electronic, magnetic, thermoelectric and lattice dynamical properties of full heusler alloy Mn ₂ RhSi: DFT study	PD Patel, SB Pillai, SM Shinde, SD Gupta, PK Jha	Physica B: Condensed Matter, (550) 376-382, 2018	2018	-	SOT, PDPU	02
The first principle calculation of structural, electronic, magnetic, elastic, thermal and lattice dynamical properties of fully compensated ferrimagnetic spin-gapless heusler compound,	PD Patel, S Shinde, SD Gupta, SD Dabhi, PK Jha	Condensed Matter 15, 61-68, 2018	2018	-	SOT, PDPU	-
First principle calculation of structural, electronic and magnetic properties of Mn ₂ RhSi Heusler alloy	PD Patel, S Shinde, SD Gupta	AIP Conference Proceedings 2005 (1), 040004, 2018	2018	-	SOT, PDPU	-
Tuning electronic properties of graphenenanoflakep olyaromatic hydrocarbon through molecular charge-transfer interactions	Sharma, SD Dabhi, S Shinde, PK Jha	AIP Conference Proceedings 1961 (1), 030031, 2018	2018	-	SOT, PDPU	-
Sensing behavior of a graphene quantum dot phenalenyl towards toxic gases,	V Sharma, S Narayan, SD Dabhi, S Shinde, PK Jha,	AIP Conference Proceedings 1942 (1), 050047, 2018	2018	-	SOT, PDPU	-
Characterization of Some Red Clays from Morbi-Wankaner Region (Gujarat, India),	Asha Anil ^a , Nirendra Mohan Misra ^b and SatyendraNathM ishra ^a	Transactions of the Indian Ceramic Society,	2018	0.558	a.CGCRI, Naroda Centre, Gujarat. b. PDPU, Gandhinagar, Gujarat	-

Zinc oxide nanorod clusters deposited seaweed cellulose sheet for antimicrobial activity	Priyank L. Bhutiya ^a , Mayur S. Mahajan ^b , M. Abdul Rasheed ^b , Manoj Pandey ^a , S. ZaheerHasan ^b , Nirendra Misra ^a ,	International Journal of Biological Macromolecules	2018	3.671	a.PDPU, Gandhinagar, Gujarat b. GERMI, Gandhinagar, Gujarat	-
CTAB Grafted PAM gel and its application in drilling fluid	Rakshith R Shettigar, Nirendra M Misra, Khushbu Patel	Journal of Petroleum Science and Engineering	2018	2.02		-
Thermo-catalytic process for conversion of lignocellulosic biomass to fuels and chemicals: a review	Sukumar Mandal, Rajib Bandyopadhyay, Asit Kumar Das1	International Journal of Petrochemical Science & Engineering	2018	-	Pandit Deendayal Petroleum University, Gandhinagar	-
Delineation of Calcium Diffusion In Alzheimeric Brain	DD Dave, BK Jha	Journal of Mechanics in Medicine and Biology	2018	SCIE, Scopus	Pandit Deendayal Petroleum University, Gandhinagar	-
Robot-storage zone assignment strategies in mobile fulfilment systems	Debjit Roy, Shobhit Nigam, Rene de Koster, Ivo Adan, Jacques Resing	Transportation Research Part E: Logistics and Transportation Review	2018	-	Pandit Deendayal Petroleum University, Gandhinagar	-
Design of safe well on the top of Atharamura anticline, Tripura, India, on the basis of predicted pore pressure from seismic velocity data	Dr Jwngsar Brahma	Journal of Petroleum Exploration Production Technology	2018	-	Pandit Deendayal Petroleum University, Gandhinagar	-
“Are we ready for Market Driven Pricing for LPG in India?”	Kaushal Kishore	Management Today-An International Journal of Management Studies,	2018	-	School of Petroleum Management (SPM), Pandit Deendayal Petroleum University (PDPU), Gandhinagar,	-
Indirect Utility reflecting Anxiety and Flexibility of Choice	Somdeb Lahiri	Journal of Economics and Management	2018	-	School of Petroleum Management (SPM), Pandit Deendayal Petroleum University (PDPU), Gandhinagar,	-
Demarcating Sweet Spots in Cambay Shale by Integrating Rock Eval Pyrolysis, Geomechanics and Seismic Data,	Sharma V. and Sircar A	Society of Petroleum Engineers. (SPE-193336-MS).	2018	-	School of Petroleum Technology	-
Mineralogical assemblage of Cambay Shale of North Cambay Basin, Gujarat, India	Sharma V. and Sircar A.,	Journal of Petroleum Exploration and Production Technology, Springer	2018	-	School of Petroleum Technology	-
Integrated	Sharma V. and	Society of	2018	-	School of Petroleum	-

Petrophysical and Geomechanical Characterization of Cambay Shale, Cambay Basin, India.	Sircar A.,	Exploration Geophysicists			Technology	
Steady-state and time-resolved fluorescence spectroscopic study of petroleum crudes in aqueous-surfactant solutions: Its implications for enhanced oil recovery (EOR) during surfactant flooding	Uttam K. Bhui, Saheli Sanyal, Ranajay Saha, Surajit Rakshit, Samir Kumar Pal	Fuel	2018	4.908	School of Petroleum Technology	-
Interaction Study of Clay bearing Amphibolite-Crude Oil-Saline Water: Molecular Level Implications for Enhanced Oil Recovery during Saline Water Flooding	Saheli Sanyal, Kumar Abhishek Singh, Harshil Parekh, Vishrut Chokshi and Uttam K. Bhui	Journal of Earth System Science	2018	0.89	School of Petroleum Technology	-
Using Monte Carlo simulation to estimate geothermal resource in Dholera geothermal field, Gujarat, India.	Shah, M., Vaidya, D., Sircar, A	Multiscale and Multidisciplinary Modeling, Experiments and Design, Springer,	2018	-	School of Petroleum Technology	-
Groundwater analysis of Dholera geothermal field, Gujarat, India for suitable applications.	Shah, M., Sircar, A., Shaikh, N., Patel, K., Thakar, V., Sharma, D., Sarkar, P., Vaidya, D.,	Groundwater for Sustainable Development, Elsevier	2018	-	School of Petroleum Technology	-
Improving electron transport in the hybrid perovskite solar cells using CaMnO ₃ -based buffer layer	Pankaj Yadav	Nano energy	2018	-	Department of Solar Energy, Pandit Deendayal Petroleum University, Raisan, Gandhinagar,	2
Low cost and solution processible sandwiched CH ₃ NH ₃ PbI ₃ -xCl _x based photodetector	Pankaj Yadav	Material research bulletin	2018	-	Department of Solar Energy, Pandit Deendayal Petroleum University, Raisan, Gandhinagar,	1
Investigating the Role of Substrate Tin Diffusion on Hematite Based Photoelectrochemical Water Splitting System	Pankaj Yadav	JNN	2018	-	Department of Solar Energy, Pandit Deendayal Petroleum University, Raisan, Gandhinagar,	1
Formation of Stable Mixed	Pankaj Yadav	JACS	2018	-	Department of Solar Energy, Pandit	18

Guanidinium–Methylammonium Phases with Exceptionally Long Carrier Lifetimes for High-Efficiency Lead Iodide-Based Perovskite Photovoltaics					Deendayal Petroleum University, Raisan, Gandhinagar,	
Influence of the Nature of A Cation on Dynamics of Charge Transfer Processes in Perovskite Solar Cells	Pankaj Yadav	Advance functional material	2018	-	Department of Solar Energy, Pandit Deendayal Petroleum University, Raisan, Gandhinagar,	15
Interpretation and evolution of open-circuit voltage, recombination, ideality factor and subgap defect states during reversible light-soaking and irreversible degradation of ...	Pankaj Yadav	Energy and environment Science	2018	-	Department of Solar Energy, Pandit Deendayal Petroleum University, Raisan, Gandhinagar,	50
Synergistic Crystal and Interface Engineering for Efficient and Stable Perovskite Photovoltaics	Pankaj Yadav	Advance Energy material	2018	-	Department of Solar Energy, Pandit Deendayal Petroleum University, Raisan, Gandhinagar,	-
Perovskite solar cells	Pankaj Yadav	Engineered Science	2018	-	Department of Solar Energy, Pandit Deendayal Petroleum University, Raisan, Gandhinagar,	4
Blue and red wavelength resolved impedance response of efficient perovskite solar cells	Pankaj Yadav	Sustainable Energy and Fuels	2018	-	Department of Solar Energy, Pandit Deendayal Petroleum University, Raisan, Gandhinagar,	-
"Highly phase-pure spray-pyrolysed Cu ₂ SnS ₃ thin films prepared by hybrid thermal treatment for photovoltaic applications"	B. Patel, M. Waldiya, and A. Ray	J. Alloys & Compounds	(2018)	-	Department of Solar Energy, Pandit Deendayal Petroleum University, Raisan, Gandhinagar,	4
Effective Photocurrent Enhancement in Nanostructured CuO by Organic Dye Sensitization: Studies on Charge Transfer Kinetics	P. Marathey, R.K. Pati, I. Mukhopadhyay, and A. Ray	J. Phys. Chem. C	(2018)	-	Department of Solar Energy, Pandit Deendayal Petroleum University, Raisan, Gandhinagar,	1
Inexpensive Cu ₂ SnS ₃ grown by room temperature aqueous bath electrodeposition for	B. Patel, I. Mukhopadhyay and A. Ray	International Journal of Modern Physics B	(2018)	-	Department of Solar Energy, Pandit Deendayal Petroleum University, Raisan,	-

thin film solar cells,					Gandhinagar,	
Quantum mechanical investigation of optoelectronic properties of gold nanoparticle attached titanium dioxide nanorods for device applications,	D. Raval, B. Tripathi and A. Ray	J. Nanopart. Res.	(2018)	-	Department of Solar Energy, Pandit Deendayal Petroleum University, Raisan, Gandhinagar,	-
Direct-coated copper nickel tin sulphide (Cu ₂ NiSnS ₄) thin films from molecular ink	A. Jariwala, T.K. Chaudhuri, S. Patel, A. Toshniwal, V. Kheraj, and A. Ray	Mater. Lett.	(2018)	-	Department of Solar Energy, Pandit Deendayal Petroleum University, Raisan, Gandhinagar,	-
Effect of annealing atmosphere on microstructure, optical and electronic properties of spray pyrolysed indium doped Zn(O,S) thin films,	M. Jani, D. Raval, R.K. Pati, I. Mukhopadhyay and A. Ray	Bull. Mater. Sci.	(2018)	-	Department of Solar Energy, Pandit Deendayal Petroleum University, Raisan, Gandhinagar,	-

3.4.7 Faculty participation in Seminars/Conferences and Symposia during the year:

No. of Faculty	International level	National level	State level	Local level
Attended Seminars/ Workshops	99	81	34	16
Presented papers	91	23	02	3
Resource Persons	8	73	12	14

3.5 Consultancy

3.5.1 Revenue generated from Consultancy during the year

Name of the Consultant(s) department	Name of Consultancy project	Consulting/Sponsoring Agency	Revenue generated (amount in rupees)
Department of Mechanical Engineering	Wear Testing of Samples	Nirma University & Indus University	18,000/-
Department of Solar Energy	Sample test for SEM; Optical test for UV Specs; Chemical endurance test for gloves	Gujarat Matikam Kalakari & Rural Technology Sanstha	5,57,640/-
Department of Solar Energy	Sample test for SEM	Yaminiben J Patel	36,050/-
S.K.Das Chemical Department	Development of floating LNG Re-gasification And Allied System	Arush Gas Technology Services LLP	86,957/-
S K Das Chemical	Development and Analysis of CO ₂ Capture systems using	Carbon Capture Technology Pvt Ltd	45,833/-

Department	Chemical Solvents		
S K Das Chemical Department	Development and Analysis of CO2 Capture systems using Chemical Solvents	Carbon Capture Technology Pvt Ltd	45,833/-
S K Das Chemical Department	Development and Analysis of CO2 Capture systems using Chemical Solvents	Carbon Capture Technology Pvt Ltd	45,833/-
S K Das Chemical Department	Development and Analysis of CO2 Capture systems using Chemical Solvents	Carbon Capture Technology Pvt Ltd	45,833/-
Indrajit Mukhopadhyay-Solar Department	Pre-Feasibility for Rooftop Solar System	U R Energy (India) Pvt Ltd	7,000/-
S K Das Chemical Department	Development and Analysis of CO2 Capture systems using Chemical Solvents	Carbon Capture Technology Pvt Ltd	45,833/-

3.5.2 Revenue generated from Corporate Training by the institution during the year

Name of the Consultant(s) & Department	Title of the Programme	Agency seeking training	Revenue generated (amount in rupees)	Number of trainees
Dr. Akash Patel, School of Petroleum Management	Executive Certificate Programme in Power Management	Gujarat Energy Training & Research Institute	21,20,000/-	25
Dr. Anirbid Sircar, School of Petroleum Technology	Campus to Corporate (City Gas Distribution)	ADANI GAS	1,00,000/-	20

3.6 Extension Activities

3.6.1 Number of extension and outreach programmes conducted in collaboration with industry, community and Non- Government Organisations through NSS/NCC/Red cross/Youth Red Cross (YRC) etc., during the year

Title of the Activities	Organising unit/ agency/ collaborating agency	Number of teachers coordinated in such activities	Number of students participated in such activities
Clean Village Campaign.	NSS, Ambapur Gram Panchayat	1	50
Cleaning public places.			
Toilet construction awareness.			
Distribution of hand-made dustbins.			
Quality Education awareness.			
Save water awareness.			
Teaching them about importance of a solar energy & Bio Gas plant.			

Programmes at night (Drama, Plays, etc).			
Tree plantations in the Ambapur School.			
Awareness about Solar energy, Bio Gas plant and various government schemes.			
NCC Day Celebration	NCC - PDP	2	35
Charitra Nirman Workshop	NCC - PDP	2	500
Combined Annual Training Camps	NCC Ahmedabad	2	10
Voting Awareness	Government of Gujarat	1	130

3.6.2 Awards and recognition received for extension activities from Government and other recognized bodies during the year

Name of the Activity	Award/recognition	Awarding bodies	No. of Students benefited
Blood Donation camp	Certificate of Appreciation	Civil Hospital Dept. of IHBT Blood bank	237
Thalassemia /Sickle cell screening camp	Certificate of Appreciation	Indian Red cross society	700

3.6.3 Students participating in extension activities with Government Organisations, Non-Government Organisations and programmes such as Swachh Bharat, Aids Awareness, Gender Issue, etc. during the year

Name of the scheme	Organising unit/ agency/ collaborating agency	Name of the activity	Number of teachers coordinated in such activities	Number of students participated in such activities
Swachh Bharat	Govt. of India	Swachh Bharat Internship	Prof. Neeta Khurana	Aditi Chopra, Bhakti Sherathiya, Bhumika Sevkani, Meghna Nagar, Zahabiya Doctor

3.7 Collaborations

3.7.1 Number of Collaborative activities for research, faculty exchange, student exchange during the year

Nature of Activity	Participant	Source of financial support	Duration
Research	IPR-PDP	BRNS	3 Years
Research	Jessica Ph.D student	Dr. Hoppe, Fredrich Schuller University, Germany	1 Year
Research	Maitrayee Trivedi, Ph.D student	Linkoping University, Sweden	1 Year
Institution	Project work on EOR by Mr. Swapnil Pancholi (M. Tech)	IRS, ONGC	Mar to May-2018

Reliance E & P Company	Ms. Vaishali Sharma	Self	May-June 2017 (1.5 Months)
Student Exchange to Okhlahoma University	3 rd Sem- 2 Nos of students 4 th Sem-1 Student	Partly PDPU	Six months
Friction Stir Welding and Laser welding of P19 and LAFM steels	Naval Material Research Lab, DRDO, Ambernath and PDPU	DRDO, Ambernath	1 Year
Development of flux assisted Laser Beam Welding process	Magod Fusion Technologies Pvt. Ltd. (MFTPL), Pune	Magod Fusion Technologies Pvt. Ltd. (MFTPL), Pune	1 Year
Ultrasonic welding of dissimilar/similar metals for various surface conditions	Roop Telsonic Ultrasonix Ltd., Gandhinagar	Roop Telsonic Ultrasonix Ltd., Gandhinagar	1 Year
Composite coating on P19 and LAFM steels (BRNS project)	VIT, Chennai campus	Collaborative activities	2 Years
Resistance spot welding using interlayer of Steel-Al (M.Tech dissertation)	IIT Roorkee	Collaborative activities	1 Year
Development of Aluminium-Stainless Steel transition pipe joints for cryogenic applications using CMT (Cold Metal Transfer) Process	CV Raman College SRM University	Collaborative activities	2 Years
Electron beam welding of Cu –Ni material	IIT, Kanpur	Collaborative activities	6 Months
International collaboration on setting up product line Silicon solar cell facility in PDPU	National University of Singapore	GoG, GoI	2018 onwards

3.7.2 Linkages with institutions/industries for internship, on-the-job training, project work, sharing of research facilities etc. during the year

Nature of linkage	Title of the linkage	Name of the partnering institution/ industry /research lab with contact details	Duration (From-To)	Participant
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Summer Internship Project	Industry Internship	http://spm.pdpu.ac.in/final-placements.html	May to July 2018	120
M. Tech project work	Implementation of 3-Phase, 3kW, Grid Tied Solar Inverter	Veeral Controls Pvt. Ltd., B-29 G I D C, Electronics Estate, Sector-25, Gandhinagar, Gujarat 382445	July, 2017-May 2018	Maitry Nayak
M. Tech project work	Development of Drive for Synchronous Reluctance Motor	Mr. Shinto Antony, Electrical Research and Development Association (ERDA), Vadodara, ERDA Road, GIDC, Makarpura, Vadodara - 390 010 Gujarat, India. Tel.: +91 265 3043129-3043131	July 2017 to May 2018	Mr. Milan Kugasiya,
M. Tech project work	Electric & Magnetic Field Produced by 400kV Double Circuit Overhead Line – Measurement & Calculations in Real Lines and Line Models	Mr. A. S. Khopkar ,Electrical Research and Development Association (ERDA), Vadodara, ERDA Road, GIDC, Makarpura, Vadodara - 390 010 Gujarat, India.	July 2017 to May 2018	Chirag Somaiya
M. Tech project work	Voltage Stability Analysis of Power System Using Optimization Techniques (PSO)	Mr. Shailesh ModiElectrical Research and Development Association (ERDA), Vadodara ERDA Road, GIDC, Makarpura, Vadodara - 390 010 Gujarat, India.	July 2017 to May 2018	Dhaval Pitroda
M. Tech project work	Thermal Loading Monitoring of Distribution Transformer using Hotspot Temperature Evaluation	Dr. S. H. Chetwani, Electrical Research and Development Association (ERDA), Vadodara ERDA Road, GIDC, Makarpura, Vadodara - 390 010 Gujarat, India.	July 2017 to May 2018	Darji Jitark
M. Tech project work	Implementation of Certain Control Schemes for Power Quality Improvement using Active Power Filter	Mr. Vinod Patel Amtech Electronics, GIDC, Gandhinagar	July 2017 to May 2018	Sagar Khstriya
Student's Internship	M. Tech Project	Zeppelin Systems India Pvt. Ltd. (Vadodara)	July 2018 to May 2019	Jaideep Bhagat and Manish Firake
Research Collaboration	Funded Research Project	Tikitar Industries Ltd, 8th Floor, Neptune Tower, Productivity Road, Baroda. 390007	Sept 2018 to Sept 2020	02

Academic	Analysis of Existing Subsurface exploration data for Assessment of Liquefaction Potential for Ahmedabad City	D.D. University, Nadiad, Gujarat	July 2018	Faculty
MoU	TomTom University Program	TomTom India Private Ltd. Binarius, 7 th Floor, Deepak Complex, Shastri Nagar, Yerawada, Pune, Maharashtra 411006.	Jan-Dec, 2018	PDPU and TomTom India Private Ltd
Internship	M. Tech project cum internship	PDPU Gandhinagar Reliance Industries, Rajkot	2017-18	Dr. Daya Kaul Dr. Chintan Singh Chudasama Dr. Schin Rewalekar
Collaborative Work	Collaborative M. Tech project	PDPU CSIR-NEERI Nagpur	2017-18	Dr. Daya Kaul Dr. Sunil Kumar
Collaborative Work	Collaborative M. Tech project	PDPU CSIR-NPL Delhi	2017-18	Dr. Daya Kaul Dr. Mahavir Singh Dr. Kirti Soni
Internship	Collaborative M. Tech project	PDPU TATA steel Jamshedpur	2017-18	Dr. Daya Kaul Dr. Priya Ranjan Kumar Guru
Research and Training	MoU	Institute of Plasma Research, Gandhinagar	Aug-2015 to Aug-2017	6
Research Facilities	Research	PRL	December, 2017	02
M. Tech Dissertation 2018-2019	Dissertation Topic: Surfactant Based Enhanced Oil Recovery	Institute of Reservoir Studies, ONGC, Chandkheda, Ahmedabad	6 months Dec'2018 – June 2019	Suryapratapsingh Bhadauria
M. Tech Dissertation 2017-2018	Dissertation Topic: Source Rock Characterization	KDMIPE, ONGC, Dehradun	18 December 2017 to 20th July 2018	Mr. Harsh Sahani
M. Tech Dissertation 2017-2018	Dissertation Drilling Technology	Institute of Drilling Technology (IDT), ONGC Dehradun	December-17 to July-18	Mr. Rajnish Tripathi
Research/consultancy	Consultancy and Collaborative Research	Institute of Reservoir Studies (IRS), ONGC	June 04 to July 06, 2018	Mr. Nilesh Bhalani & Mr. Sachin Nambiar
Research/consultancy	Consultancy and Collaborative Research	Joshi Technologies International	June 05 to July 17 2018	Mr. Param Pandya & Mr. Tapan Patel
Research/consultancy	R&D-Software	Baker Hughes	June 06 to July 14 2018	Ms. Karmita Dalawat & Ms. Tanya Ann Mathews

Research	R&D	DGH-National Core Repository	June 04 to July 06 2018	Mr. Nirmal Kumar Patel
Research	R&D	PNGRB -CGD	July 2017 to June 2018	02
Research/Consultancy	Research	Adani Gas-CGD	July 2017 to June 2018	03
Research/Consultancy	Research	Torrent/Mahesh Gas-CGD	July 2017 to June 2018	02
Research/consultancy	Consultancy and Collaborative Research	Well Stimulation Services (WSS), Ahmedabad, ONGC	June 11 to July 06 2018	01
Research/consultancy	Consultancy and Collaborative Research	Oil India Ltd (OIL)	July 2017 to June 2018	03
Research/consultancy	Consultancy and Collaborative Research	Gumpro Drilling Fluids	July 2017 to June 2018	02
Research/consultancy	Consultancy and Collaborative Research	OILEX	July 2017 to June 2018	01
Research/consultancy	Consultancy and Collaborative Research	Merilon Energy Resources Ltd.	July 2017 to June 2018	02
Research/consultancy	Consultancy and Collaborative Research	Focus Energy	July 2017 to June 2018	01
Research/consultancy	Consultancy and Collaborative Research	Shraddha Associates Gujarat Pvt Ltd.	July 2017 to June 2018	02
Research/consultancy	Consultancy and Collaborative Research	Haliburton	July 2017 to June 2018	01
Research/consultancy	Academic Software Pederal and Eclipse	Schlumberger	July 2017 to June 2018	02
Project Work	Comprehensive Project	ADM Meters, Ahmedaba	Jan-2018 to June 2018	02
Collaborative Project	Development of textured Silicon/Graphene interface for photodetector application	East Paris Institute of Chemistry and Material Science, CNRS Framce	2017- on going	03
Collaborative project	Transfer of Perovskite Solar cells Technology	Polish Academy of Science (POLAND)	2018-2019	04
Collaborative project	Development of DSSC solar cells	King Khalid University (Saudi Arabia)	2018-2019	02

3.7.3 MoUs signed with institutions of national, international importance, other universities, industries, corporate houses etc. during the year

Organisation	Date of MoU signed	Purpose and Activities	Number of students/teachers participated under MoUs
-	-	-	-

CRITERION IV – INFRASTRUCTURE AND LEARNING RESOURCES**4.1 Physical Facilities**

4.1.1 Budget allocation, excluding salary for infrastructure augmentation during the year

Particulars	Budget Allocated for Infrastructure augmentation (in Lakhs)	Budget utilized for infrastructure development (in Lakhs)
Campus Area		
Class Rooms		
Laboratories	175.00	146.11
Seminar Halls		
Classrooms with LCD facilities		
Classrooms with Wi Fi / LAN		
Seminar halls with ICT facilities		
Video Camera		
Equipment purchased during the current year	91.00	117.62
Others (Computers & Software, Electrical Installation, Furniture & Fixtures, Books)	385.85	269.72
Total Budget (in Lakhs)	651.85	533.46

4.1.2 Details of augmentation in infrastructure facilities during the year

Facilities	Existing	Newly added
Campus area	98.15 Acres	
Class rooms	60	
Laboratories	97	03
Seminar Halls	02	
Classrooms with LCD facilities	60	
Classrooms with Wi-Fi/ LAN	60	
Seminar halls with ICT facilities	01	
Video Centre	-	
No. of important equipments purchased (\geq 1-0 lakh) during the current year.	-	14
Value of the equipment purchased during the year (Rs. in Lakhs)		117.62 Lakhs
Other(Computers & Software, Electrical Installation, Furniture & Fixtures, Books)	-	269.72
Auditorium	01	
Cafeteria	01	
Gym	01	
Stationary Store	01	
Hospital	01	
Indoor and Outdoor sports facility	All	

4.2 Library as a Learning Resource

4.2.1 Library is automated {Integrated Library Management System (ILMS)}

Name of the ILMS software	Nature of automation (fully or partially)	Version	Year of automation
TCSiON Library Module	Fully automated	--	2007

4.2.1 Library Services

	Existing		Newly added		Total	
	No.	Value	No.	Value	No.	Value
Text Books	37265	30,629,956.00	2388	1,476,974.00	39653	32,106,930.00
Reference Books	16673	6,809,198.00	197	1,005,198.00	16870	7,814,396.00
e-Books	12048	5,85,239.00	12475	1,63,203.00	24523	748,442.00
Journals	207	1,069,180.00	123	6,63,753.00	330	1,732,933.00
e-Journals	5124	2,925,145.00	2825	9,71,341.00	7949	3,896,486.00
Digital Database	07	1,261,898.00	7	6,54,712.00	14	1,916,610.00
CD & Video	3730	8,18,151.00	278	67,596.00	4008	885,747.00
Library automation	TCS iON : {Integrated Library Management System (ILMS)}					
Weeding (Hard & Soft)	-	-	-	-	-	-
Others (specify)	-	-	-	-	-	-

4.2.2 E-content developed by teachers such as: e-PG-Pathshala, CEC (under e-PG-Pathshala CEC (Under Graduate) SWAYAM other MOOCs platform NPTEL/NMEICT/any other Government initiatives & institutional (Learning Management System (LMS) etc.

Name of the teacher	Name of the module	Platform on which module is developed	Date of launching e – content
-	-	-	-

4.3 IT Infrastructure

4.3.1 Technology Up-gradation (overall)

	Total Computers	Computer Labs	Internet	Browsing Centres	Computer Centres	Office	Departments	Available band width (MGBP)	Others
Existing	1103	06	275Mbps (1:1)	Note-1	Note-2	04	Note-3	2.0	
Added	144	01	50Mbps (1:1)			00		00	
Total	1247	07	325Mbps (1:1)			04		2.0	

Note-1:The entire campus is covered using Wi-Fi connectivity so that LAN and internet connectivity is accessible throughout the entire campus.

Note-2:ICT-enabled Computer labs/classrooms/library/learning spaces available within the University

Note-3:The University has a central level IT Department which is responsible for the repairs and maintenance of IT and audio-visual equipment. Additionally, maintenance contracts and/or extended warranties are also in place. Maintenance services are provided throughout the day to all the faculty, staff and students.

4.3.2 Bandwidth available of internet connection in the Institution (Leased line)

2.0 GBPS

4.3.3 Facility for e-content

Name of the e-content development facility	Provide the link of the videos and media centre and recording facility
-	-

4.4 Maintenance of Campus Infrastructure

4.4.1 Expenditure incurred on maintenance of physical facilities and academic support facilities, excluding salary component, during the year

Particulars	Assigned budget on Academic facilities (in Lakhs)	Expenditure incurred on maintenance of academic facilities (in Lakhs)	Particulars	Assigned budget on physical facilities (in Lakhs)	Expenditure incurred on maintenance of physical facilities (in Lakhs)
Admission Expenses	266.80	184.84	Power & Lighting	260.70	277.33
Student Welfare Expenses	892.20	770.62	IT Services	105.50	81.47
University Cell Expenses	138.90	125.22	General Administration Expenses	446.70	311.28
Laboratory Consumable Expenses	23.50	11.46	Repairs & Maintenance	239.30	254.73
Teaching & Research Assistantship	205.20	126.07	Contingency Expenses	215.50	97.25
Printing & Stationery	29.40	39.56			
Library Expenses	91.00	64.96			
Placement Cell Expenses	137.00	93.14			
Total Budget (in Lakhs)	1,784.00	1,415.86	Total Budget (in Lakhs)	1,267.70	1,022.06

4.4.2 Procedures and policies for maintaining and utilizing physical, academic and support facilities - laboratory, library, sports complex, computers, classrooms etc. (maximum 500 words) (information to be available in institutional Website, provide link)

Weblink: <http://www.pdpu.ac.in/library-pdpu.html>

Procedure & Policies for maintaining and utilizing the facilities

Library Rules:

- **Silence** should be maintained in the library premises.
- A maximum of 25 books for duration of 3 months to Faculty,
- Books for duration of 2 weeks to students.
- Students are entitled to **renew books (max. twice)** depending upon the demand of required books.
- An **overdue charge of Rs. 2/- per day** will be charged on late return of books.
- Books will be issued on producing the **Identity card**.
- Books should be checked for **missing pages or damage** before issue. The student will be held responsible for any damage/missing pages found, and the penalty would be at the discretion of the librarian.
- Library resources like reference books, periodicals, bound volumes, annual reports, CD's audio/video cassettes are to be **referred within the library premises**.
- **Issued books/Personal Books, files, and other personal belongings are not allowed** into the library.
- Defaulting of the above rules will lead to **termination of library membership**.
- **Mobile Phone** is to be switched off within the library premises.

Library Membership

All members of PDPU- Staff and Students, can be the members of LIC. The loan Limits and duration of loan are mentioned below:

Members	Item	Loan limits	Duration
Faculty	Books	25	3 months
	Periodicals	2	1 day
	CD's	2	1 day
	Reference	2	1 day
Students	Books	3	2 weeks
Staff	Books	5	1 month

Timings:

Reading Room: Monday to Friday: 9.30 a.m. – 8.00 p.m.
Saturday: 9.30 a.m. – 6.00 p.m.

Issue/Return: Monday to Friday: 9.30 a.m. – 7.30 p.m.
Saturday: 9.30 a.m. – 7.30 p.m.

(Closed on Sunday and Public Holidays)

Sports

- All the sports teams of PDPU are informed and instructed not to play any matches during 9 a. m. to 4 p. m. during academic and working days.
- Students having formal periods as per the weekly class time table for Sports can play sports during the working hours as per the instruction of the Sports Faculty.

Computer LAB Rules

- 1) Other Students will not be allowed inside the Computer LAB while a Practical session is already going on.
- 2) Students should keep their bags at the space marked with **"Keep your Bags here"** in the laboratory whenever they enter into it .
- 3) Students can use their own laptop in the laboratory only with the prior permission of lab assistants.
- 4) For Laptop usage the students should not pull the LAN cable/power cables from Computer and plug in to their Laptop.
- 5) Only those students will be allowed inside the LAB who wants to access Computer Internet for learning purpose with permission from lab assistants. Laboratory should not be used for reading/writing purposes.
- 6) Talking loudly with their colleagues, bringing food/beverages inside the LAB, playing games, opening or downloading the restricted websites, etc is prohibited.
- 7) If any problem is found in Mouse, Keyboard, Monitor, Computer; the Students should contact lab assistant.
- 8) In the event of theft, breakage or misuse, the students shall be held accountable and be dealt with severely.
- 9) The student will have to write their details in lab attendance register whenever they use the laboratory.
- 10) Mobile phones are strictly prohibited in the laboratory.

Note: - LAB remains open from 9:00AM to 6:00PM (Monday to Friday)
The students must be having their I-Card.

CRITERION V - STUDENT SUPPORT AND PROGRESSION

5.1 Student Support

5.1.1 Scholarships and Financial Support

	Name /Title of the scheme	Number of students	Amount in Rupees (in Lakhs)
Financial support from institution	Merit Scholarship	44	47.14
	For Foreign Visit-Semester Programme	6	22.00
	Merit cum means	89	88.31
Financial support from other sources			
a) National	Student Travel Support	185	90.45
b) International	IEP	70	108.61
c) Study India Programme	---	---	---

5.1.2 Number of capability enhancement and development schemes such as Soft skill development, Remedial coaching, Language lab, Bridge courses, Yoga, Meditation, Personal Counselling and Mentoring etc.,

Name of the capability enhancement scheme	Date of implementation	Number of students enrolled	Agencies involved
Soft Skill Training (SPM)	August 2017	118	Free Lancer & school faculty
Campus Placement Training Program (FOET)	3 rd August 2017	575	Logic Academy & school faculty

5.1.3 Students benefited by guidance for competitive examinations and career counselling offered by the institution during the year

Year	Name of the scheme	Number of benefited students by Guidance for Competitive examination	Number of benefited students by Career Counselling activities	Number of students who have passed in the competitive exam	Number of students placed
2017	Career Counselling Session (FOET)	237(GATE)	575	81(GATE)	264
2017	Student Mentorship (SPM)	NA	105	NA	NA
2017	Summer Internship Mentorship (SPM)	NA	105	NA	NA
2017	Certificate Course in Governance and Leadership	105	-	TWO(UPSC) + Three(GPSC)	1 IRAS 1 IRS (IT) 3 GPSC

5.1.4 Institutional mechanism for transparency, timely redressal of student grievances, Prevention of sexual harassment and ragging cases during the year

Total grievances received	No. of grievances redressed	Average number of days for grievance redressal
???	???	???

5.2 Student Progression

5.2.1 Details of campus placement during the year

On campus			Off Campus	
Number of Students Participated	Number of Students Placed	Name of Organizations Visited	Number of Students Participated	Number of Students Placed
469 Faculty of Engineering and Technology	264	103	NA	NA
96 School of Petroleum Management	95	35	9	9

5.2.2 Student progression to higher education during the year

Year	Number of students enrolling into higher education	Programme graduated from	Department graduated from	Name of institution joined	Name of Programme admitted to
2017-18	20	B. Tech.	Electrical Engineering	Stevens Institute of Technology State University of New York at New Paltz California state University Los Angeles Auburn University	Master's Program
2017-18	14	B. Tech.	Industrial Engineering	George Washington University University of Southern California University of Texas Northeastern	Master's Program

				University Lowa State University Arizona State University Clemson University	
2017-18	20	B. Tech.	Chemical	Universities at Abroad	Master's Program
2017-18	35	B. Tech.	Civil	Universities at Abroad	Master's Program
2017-18	20	B. Tech.	Electrical	Universities at Abroad	Master's Program
2017-18	18	B. Tech.	Mechanical	Universities at Abroad	Master's Program
2017-18	3	B. Tech.	Petroleum	Universities at Abroad	Master's Program
2017-18	1	B. Tech.	Thermal Engineering	Universities at Abroad	PhD
2017-18	1	B. Tech.	Chemical	Universities at Abroad	PhD
2017-18	3	B. Tech.	Department of Nuclear Science and Technology	Institute of Plasma Research, Gandhinagar	PhD
2017-18	61	BA/BBA B.Com (Hons)	SLS	Universities at Abroad	Master's Program

5.2.3 Students qualifying in state/ national/ international level examinations during the year (eg: NET/SET/SLET/GATE/GMAT/CAT/GRE/TOFEL/Civil Services/State Government Services)

Items	No. of Students selected/ qualifying	Registration number/roll number for the exam
NET		
SET		
SLET		
GATE	81	
GMAT		
CAT		
GRE		
TOFEL		
Civil Services	02	0124582(AIR-401 in 2017) 0430488(AIR-702 in 2017)
State Government Services	03 (Gujarat Public Service Commission)	101028584 (Rank 120 in 2017) 101036517 (Rank 271 in 2017) 109126212 (Rank 355 in 2017)
Any Other		

5.2.4 Sports and cultural activities / competitions organised at the institution level during the year

Sr. No.	Activity	Level	No. of Participants
1	Rang artbeat exhibition	University Level	30
2	Independence day celebration	University Level	250
3	Times of India fresh face	University Level	25
4	Jharokha Showcase	University Level	100
5	Sports Introductory session	University Level	70
6	Brahmand Introductory session	University Level	60
7	Respawn Introductory session	University Level	100
8	VGA Introductory session	University Level	50
9	Mindripple's MRIQ (Year Round Weekly Quiz)	University Level	Avg 30 students
10	Mindripple's fresher's quiz	University Level	120
11	Encode Introductory session	University Level	120
12	Social & Cultural Clubs Showcase	University Level	500
13	Avionics introductory session	University Level	60
14	Brahmand Discussion	University Level	40
15	Carrom & Chess camp	University Level	35
16	Anirveda introductory session	University Level	50
17	Volleyball intra	University Level	150
18	Anirvedapetroeconomics session	University Level	40
19	Engineer's day celebration	University Level	450
20	Volleyball intra & Football intra	University Level	200
21	Shiksha story's session	University Level	35
22	Encode c++ workshop	University Level	60
23	Sorrison Photowalk	University Level	25
24	Encode c++ workshop	University Level	60
25	Sorrison Basic Photography	University Level	35
26	Taekondo selection	University Level	30
27	Volleyball and Table tennis intra	University Level	100
28	Thalassemia camp and Blood donation camp	University Level	800
29	Soul pepper's garba workshop	University Level	250
30	Jharokha's Blind date with Book	University Level	30
31	Offbeat's Karaoke	University Level	20
32	South block Ghoshti	University Level	50
33	Yoga and Fitness Club's Introductory session	University Level	35
34	SPPG PDPU Student Parliament	University Level	250
35	Semi Classical Workshop	University Level	20
36	Jamming Session	University Level	100
37	Discussion - Offbeat	University Level	25
38	Low Light Photography Workshop	University Level	35
39	Theatre Workshop	University Level	30
40	Instrumental Workshop	University Level	15
41	Monthly Movie Session - VGA	University Level	45

42	Body Percussion Workshop	University Level	20
43	Human Board Game	University Level	50
44	Carrom Intra	University Level	40
45	Yoga Session	University Level	30
46	Video Session on Sustainable Living	University Level	60
47	Calligraphy Workshop	University Level	120
48	PDPU Open Tennis Championship	National Level	150
49	Yoga Session	University Level	30
50	Basic Robotics Workshop	University Level	60
51	Doomsday	University Level	60
52	Hip Hop Workshop	University Level	50
53	Faded - Panache	University Level	60
54	Jashna Auditions	University Level	30
55	Athletics Intra & Kabaddi Camp	University Level	60
56	Saaz Auditions	University Level	40
57	Proccenium Auditions	University Level	40
58	Lectures on Plane & Helicopter	University Level	60
59	Taekwando Intra	University Level	20
60	Offbeat's Guitar Workshop	University Level	25
61	Jharokha's Wordsworth	University Level	45
62	Light & Low Light Workshop	University Level	35
63	Film Making Master Class	University Level	40
64	Kabbadi Camp	University Level	35
65	Garage Sale - Envirofreaks	University Level	200
66	Dfrenetics	University Level	30
67	Basketball Intra	University Level	80
68	Chess & Carrom Intra	University Level	60
69	Dfrenetics Dance Auditions	University Level	30
70	Chintan Pandya's Dakla Tarika	University Level	40
71	TESSERACT 2017	Inter & Intra University Level	1000
72	Kavyajanli	University Level	60
73	Monthly Movie Session	University Level	40
74	Saaz Finale	University Level	50
75	Spill the beans	University Level	50
76	Lawn Tennis Intra	University Level	30
77	Wall Graffiti	University Level	100
78	Bacis Electronics Workshop	University Level	75
79	Basic Film Making	University Level	40
80	Book Mark Making Competition	University Level	60
81	Debate on GST	University Level	15
82	Special Documentary Screening	University Level	40
83	Kite Festival Celebration	University Level	500
84	Performance by Shubhendra Rao	University Level	150
85	Mandala Workshop	University Level	70
86	Youth Day Celebration	University Level	200
87	Basic Film Making Workshop	University Level	40
88	Chal Dhal	University Level	50

89	Tug Of War Intra	University Level	100
90	Impromptu Poetry	University Level	25
91	Doodle Quotes Competition	University Level	15
92	Republic Day Celebration	University Level	250
93	Glider Workshop	University Level	60
94	Offbeat'sTaalmeela (Music Week)	University Level	400
95	Jashna Auditions	University Level	40
96	Neon Rush	University Level	300
97	Sports Photography Workshop	University Level	40
98	Musical Movie Screening	University Level	70
99	PDPU Open Quiz	Inter & Intra University Level	450
100	Box Making Workshop	University Level	50
101	Vaartalap	University Level	50
102	Guest Lecture by Rahul Sharma	University Level	50
103	Story Completion Competition	University Level	20
104	Proscenium Audition	University Level	50
105	Zumba Workshop	University Level	60
106	Monthly Movie Session	University Level	40
107	Chuck Glider making Workshop	University Level	60
108	Matlab Workshop	University Level	60
109	Samanvay - A Talk Series	University Level	15
110	Entrepreneur Workshop	University Level	60
111	Off Campus Donation Drive	University Level	40
112	PetroCup 2018	Inter & Intra University Level	2500
113	Ardunio Workshop	University Level	60
114	Unplugged	University Level	45
115	Vaartalap	University Level	25
116	Master Editing Workshop	University Level	40
117	Flare Theme Launch - Flea Market	University Level	1000
118	Jashnna Finale	University Level	50
119	Phoebus	University Level	50
120	Grooming Workshop	University Level	20
121	Prosenieum Final	University Level	30
122	Vaartalap	University Level	30
123	Workshop on Carbon Footprint	University Level	40
124	Poetry Performance	University Level	20
125	Horizons 1.0	University Level	60
126	Modeling Workshop	University Level	30
127	Editing Workshop	University Level	35
128	Python Workshop	University Level	60
129	I Policy	University Level	30
130	HoliColors Photography	University Level	30
131	Charcoal Drawing Workshop	University Level	60
132	Vaartalap	University Level	30
133	Monthly Movie Session	University Level	40
134	FilmMaking Master Class	University Level	45

135	Editing Workshop	University Level	40
136	Clay Art Competition	University Level	70
137	Tedx PDPU	State Level	100
138	N'zest Intra Audition	University Level	45
139	Stellarium, Universe Sandbox 2.0, Clinometer Workshop	University Level	80
140	Basic Telescope Making	University Level	60
141	Web Development	University Level	100
142	Amethyst Auditions	University Level	100
143	Spotlight- The Talent Show by Support Staff of PDPU	University Level	35
144	Emotions Auditions	University Level	40
145	Karaoke	University Level	35
146	Unplugged	University Level	40
147	Dance Workshop	University Level	50
148	Flare 2018	University Level	1000
149	Monthly Movie Session	University Level	60
150	Code Spy	University Level	60
151	Editing Essence Workshop	University Level	45
152	Space Simulators	University Level	50
153	Wireless Robotics Workshop	University Level	60
154	Basic Telescope Making	University Level	60
155	Dot Net Workshop	University Level	70
156	Android App Development	University Level	100
157	Community Development Initiative	Rural Surrounds	400
158	Yoga Day Celebration	University Level	80

5.3 Student Participation and Activities

5.3.1 Number of awards/medals for outstanding performance in sports/cultural activities at national/international level (award for a team event should be counted as one)

Year	Name of the competition	Awards	National/International	Sports	Cultural	Student ID number	Name of the student
2018	Zonal Award 2018: Zone 1:	Zonal Award	State	-	Rotaract club of PDPU	15BLS143	Rutva Shah
2018	Group Dance Competition at Shanti Business School	Winners Dance Competition	State	-	Camaderi e Bhangra Dance Group	14BPE053	Prashant kumar
2017	Justice League 2017 winners boys	runners up boys, Girls winners	National	Basketbal 1		14BEE053	Rishabh Mehta
2017	Nirma sports fest	Winners both boys and girls winner	National	Basketbal 1		16BCO100	Kalash Kothari
2017	Petrocup 2017	runner's up boys, Girls winners 2017	National	Basketbal 1		16BCO100	Kalash Kothari

2017	Khel maha khubh 2017	winner	State	Basketball		16BCO100	Kalash Kothari
2017	iim 2017	runner up girls	National	Badminton		16BCE010	Hansal Shah
2017	Petrocup	boys winner, girls winner	National	Lawn tennis		16BCL051	Om Rakholia
2017	daiict	Winner	National	Lawn tennis		16BCL051	Om Rakholia
2017	Nirma Sports fest 2017	Winner	National	Kabaddi		15BME107	Jinesh Sanghvi
2017	Justice league 2017	Runners up	National	Kabaddi		15BME107	Jinesh Sanghvi
2017	Daiict 2017	Runners up girls	National	Kabaddi		15BME107	Jinesh Sanghvi
2017	Petrocup 2017	winner boys	National	Kabaddi		15BME107	Jinesh Sanghvi
2017	Petrocup-2017	winner	National	Football		16BPE001	Aditya Radia
2017	Daiict-2017	winner	National	Football		16BPE001	Aditya Radia
2017	Khel maha khubh-2017	winner boys	State	Football		16BPE001	Aditya Radia
2017	petrocup-2017	Winners	National	Football		16BPE001	Aditya Radia
2017	PetroCup - 2017	Winners	National	Cricket		14BCH041	Jinel Patel
2017	Concours' - 2017	Runners Up	National	Cricket		14BCH041	Jinel Patel
2017	AUCC - 2017	winner	National	Cricket		14BCH041	Jinel Patel
2017	Petrocup 2017	Winners	National	Chess		15BCH010	Vishesh Doshi
2017	Adani	Runners up boys	National	Chess		15BCH010	Vishesh Doshi
2017	petrocup '17	Runners up girls	National	Table tennis		14BLS118	Upasana Purohit
2017	Justice League '17	Winners girls	National	Table tennis		14BLS118	Upasana Purohit
2017	Shaurya'17	Runner up girls	National	Table tennis		14BLS118	Upasana Purohit
2017	concours'17	Runners up boys	National	Table tennis		16BPE129	Umang Thapa
2017	Nirma Sports fest 2017	Winners boys	National	Volleyball		14BEE089	Sudhanshu Narvalia
2017	Justice league 2017	Winners boys	National	Volleyball		14BEE089	Sudhanshu Narvalia
2017	Petrocup 2017	Runners up girls	National	Volleyball		14BEE089	Sudhanshu Narvalia
2017	Petrocup 2017	Winners girls	National	Volleyball		14BEE089	Sudhanshu Narvalia
2017	Justice league 2017	Winners girls	National	Volleyball		14BEE089	Sudhanshu Narvalia
2017	Khel mahakumbh 2017	First Place	State	Volleyball		14BEE089	Sudhanshu Narvalia
2017	ESPA Quiz	1st Position	National	Quizing	Mind~Ripple Club	16BME028	Farhan Khimani

2017	Meteorological Quiz	3rd position	National	Quizing	Mind~Ripple Club	16BME028	Farhan Khimani
2017	LD Quiz	3rd position	National	Quizing	Mind~Ripple Club	17BLS312	Mayank Duggar
2017	Meteorological Quiz	2nd position	National	Quizing	Mind~Ripple Club	16BCH007	Yash Bhatt
2017	Astro Quiz	1st Position	State	Quizing	Mind~Ripple Club	16BCH007	Yash Bhatt
2017	Meteorological Quiz	3rd Position	National	Quizing	Mind~Ripple Club	16BEE035	Suresh Jadia
2017	Fresher's Quiz	1st Position	State	Quizing	Mind~Ripple Club	17BEE073	Rishabh Thacker
2017	Streetplay Contest at GNLU, PDPU, NIFT	2nd position	State	Dramatics	Soul Pepper Club	17BEE073	Rishabh Thacker

5.3.2 Activity of Student Council & representation of students on academic & administrative bodies/committees of the institution (maximum 500 words)

To augment the students' educational experience at PDPU; the Office of Student Activities, Involvement & Leadership (OSAIL) encourages bounteous and innumerable opportunities for students to explore and enhance creative and managerial skills. Under the mentorship of OSAIL, the students ideate and execute events, run their organizations as an automoums body. They keep campus buzzing but the learning outside the classroom comes as an added advantage – team work, financial planning & management, time management, marketing & promotions, communication and negotiation skills....all these they learn with fun.

Office of Student Activities, Involvement & Leadership works to help students to explore, nurture and exhibit their passion and develop life & leadership skills. Thus, in such short time span of the Universities existence, its students have organized number of events in fields of art, culture, language, media, sports, science & technology etc. In the year 2017-18 there were total 21 student organizations, which conducted around 158 Intra University, Inter University and National level events.

The students' organizations in PDPU are broadly categorized as: Social & Cultural, Science & Technical and Sports. The activities at the OSAIL are largely driven by Student Clubs, Student Chapters of professional societies and each focusing on different aspects of art, culture, or science—as well as a theatre, film archive, robotics, and photography. Many Clubs host exciting programs, lectures, classes and activities for students throughout the year. From theatrical plays and musical performances to robo wars and guest speakers, students can find a breathtaking range of university-sponsored activities that will expand students' world view and enrich their life

With support and mentoring of the office, students organizes various inter college and intra college sports, culture, technical and social events. FLARE - Annual Cultural festival, Tesseract – Annual Technical festival and Petrocup – Annual Sports festival are gaining popularity among students of other reputed institutes and received good participation during inter college events.

5.3 Alumni Engagement

5.3.1 Whether the institution has registered Alumni Association? **No**, if yes give details (maximum 500 words):

5.3.2 No. of registered Alumni:

5.3.3 Alumni contribution during the year (in Rupees):

5.3.4 Meetings/activities organized by Alumni Association:

School of Petroleum Management (SPM)

- Inviting Alumni for Alumni Interaction/Sessions
- Buddy Mentorship Programme (One Students allotted to One Alumni for mentorship)
- Alumni Meeting Chapterwise

Alumni Meetings Chapter Wise	Date
Delhi	10/02/18
Bangalore	09/12/17
Mumbai	06/01/18
Gandhinagar	20/01/18

Faculty of Engineering and Technology (FOET)

- Alumni Meet was organized on 24th Dec 2017 by School of Technology.
- Alumni Meet was organized on 9th February 2018 by School of Petroleum Technology.

CRITERION VI –GOVERNANCE, LEADERSHIP AND MANAGEMENT**6.1 Institutional Vision and Leadership*****Vision***

“To be an Internationally Renowned and Respected Institution Imparting Excellent Education and Training Based Upon The Foundation of Futuristic Research and Innovations.”

Mission

The mission of the University is as follows.

- i. To undertake unique obligation for Education in Energy Engineering and Management with special responsibilities in domain specific aspects of Energy & Infrastructure.
- ii. To seek to nurture students of extraordinary motivation and ability and prepare them for life-long learning and leadership in an increasingly knowledge driven world.
- iii. To envisage establishing institutes of excellence in education, competitive edge in research and real time relevance with futuristic thrusts in offering of programmes and undertaking of activities and projects.

6.1.1 Mention two practices of decentralization and participative management during the last year (maximum 500 words)

- i) The recruitment process is jointly carried out by the concerned Department/School and the University for teaching and non-teaching positions.
- ii) Certain financial powers are vested with the Directors of the School.

6.1.2 Does the institution have a Management Information System (MIS)?

Yes

PDPU leadership deliberates on the School and University futuristic needs to meet with the requirements as defined in vision and mission statement.

Key issues related to Management System Development, Implementation and Continuous Improvement are discussed and appropriate decisions are taken at the meetings of the Statutory Bodies. The Board of Governors (BoG) and Finance Committee (FC) take active interest in understanding the developmental strategies of the University and direct on all broad areas of development and internal quality enhancement.

Research Advisory Board (RAB) contributes with critical inputs and new ideas for research & development and incorporating cutting edge research in the framing/updating of curricula.

The Office of Planning and Development looks in to the emerging areas of knowledge and research and provides inputs for the development and implementation of new projects.

BoG has constituted a Standing Committee to oversee, guide and support the university in policy implementation.

To achieve the goals of providing excellent education and training, discussions are regularly held with internal stakeholders thereby specifying updated organizational needs for infrastructure and other resources.

Guidance of the leadership helps in obtaining the resources and judiciously utilizing and using all resources at optimum level. The resources requirements are built in to the budgets and the

same are discussed in Finance Committee Meeting for further action and allocation. Academic issues are taken up in the meetings of Academic Council. There are also support offices like Office of International Relations and Office of Research & Sponsored Projects.

6.2 Strategy Development and Deployment

i) Curriculum Development

Through the Board of Studies and Faculties the curriculum related matters are reviewed at its meetings. Annually, the exercise is followed at three levels starting with internal subject-wise faculty meetings followed by Board of Studies meetings and then in the faculty meetings. The faculty-wise recommendations are presented to the Academic Council for final deliberations, guidance and approval. PDPU faculty members also receive inputs and guidance from members of the Research Advisory Board and Board of Governors which comprise of eminent national academicians and industry stalwarts.

To guide the exercise of curriculum review University follows a formal feedback system to obtain inputs from various stakeholders. The students' feedback on each course and its respective faculty have been collected and taken into consideration, while reviewing. Annually the interactions with alumni has been organized to obtain their views on the curriculum they studied and its usefulness in the profession. Also through individual meetings, discussions during seminars, conclaves, workshops, industry visits; inputs are obtained from the professionals to help ideate changes and modifications in the curriculum to make students more industry ready. Similarly, inputs are also obtained from senior academicians of leading institutions in India and abroad when they visit the University or the University faculty and management visit other institutions.

ii) Teaching and Learning

Objectives:

- To develop excellence in curriculum development.
- To create innovative research oriented faculty resources.
- To enhance the capability of University by commencing new academic programmes.

The above objectives are served through following strategic initiatives:

- To create innovative research oriented faculty resources.
- Collaborate with international faculties.

Initiatives to improve instruction methods to focus on student centric learning:

- a. Design thinking to optimize student learning:** Students are assigned to design a project and its plan of work so that they can focus on developing creativity and build up confidence through hands-on projects.
- b. Focused group study:** Students are divided into specific groups and are assigned specific topics related to curricular learning. These groups study the topics in detail through library books, internet, and library journals. Thereafter, the topics are discussed by individual groups in the class and the teacher further guides them about the specific topic.
- c. Student-directed learning:** Attempts are made to create excitement in the classroom through posing problems related to the topic and finding solutions thereby presenting and learning the topic, which ensures students do more than listening through active participation.

- d. **Learning in practice:** Real life examples related to application, analysis, synthesis and evaluation/ creation are given to the students to imbibe the learning into them.
- e. **Develop lifelong learning attitude:** Focus is given on developing abilities/ skills which are central to the discipline and help prepare the student on what is important to the discipline and also developing lifelong learning skills.
- f. **Web based learning:** This also helps in generating self-learning environment. For this, the University provides internet facility for 24 hr.
- g. **Presentations:** Students to prepare and present any topic from the curriculum and also on any non-technical topics.
- h. **Soft skill classes for personality development:** Students are encouraged to deliver presentations in the which help them to develop ability to gather information, make decisions and interact with others. Soft skills classes empower students with confidence, to express and to work together.
 - Capsule courses to enhance competency and employability quotient of students.
 - 10% of each course is being taught by industry professionals.

iii) Examination and Evaluation

Student Academic Policy and Academic Calendar highlighting the evaluation process and other relevant information are published at the beginning of the academic year.

The evaluation rules are made in advance to the newly admitted students in the form of 'Student Handbook' at the beginning of the academic year. The faculty members may also provide some specific directions about their course evaluation process.

To assess the academic performance of students, a continuous evaluation system is followed. At the end of each semester, each student is awarded a letter grade in each course by the concerned teacher, based on his/her performance in mid-semester examination, end-semester examination, tests, assignments, tutorials, laboratory work, seminars, projects, etc... The teacher announces the mode of evaluation and distribution of marks at the beginning of the course. It is obligatory to maintain laboratory journal as prescribed by the teacher. End-semester practical examinations for laboratory courses are normally held at the end of the term before the final theory examination.

For all examinations the evaluated answer books are shown to the students, by the concerned teacher, within the prescribed time limit/as per the Academic Calendar.

iv) Research and Development

A Office of Research and Sponsored Programs (ORSP) is established to provide support for the internal funded grants, pre-award and post-award support for externally funded grants and support information on grant compliance.

The University endeavours for

- Development of research strategy through Research Advisory Board (RAB).
- Collaboration with Industry to promote research.
- Collaboration with national and international universities to promote.
- Seed money to student and faculty for undertaking research projects.
- Patents Registration.
- Promoting Innovation Incubation Centre.

v) Human Resource Management

HR policy of the university has a well-defined plan to attract the best National and International faculty to the University and to provide performance-based incentives to the appointed faculty.

vi) Industry Interaction / Collaboration

Industry Interaction: MDPs and Conferences on Industry relevant themes are conducted to extend faculty expertise to industry and vice versa. The industry internships and training programmes are also arranged for students. Industry connect programs are also held every year.

International Exposure Program: This is not just for cross culture understanding, but a well-structured academic program to undergo in an international level Institution abroad. IEP also helps understand the pattern of Higher Education abroad and foreign culture. This also facilitates students who are considering study abroad as upward mobility in Higher Education.

6.2.2 : Implementation of e-governance in areas of operations

Planning and Development

Administration:
Online admission system

Finance and Accounts:

- Employees Salary transfers directly to their bank account.
- Online Pay slip generation.
- Data management by software.

Student Admission and Support:

- Email system for certificate request.
- Circulars & Notices have been informed through emailers.
- Online fees payment option.

Examination

- Online exam registration.
- Result through email.

6.3 Faculty Empowerment Strategies

6.3.1 Teachers provided with financial support by way of Professional Development Allowance of Rs. 3 lakh over the quarter of 3 years; to attend conferences / workshops and towards membership fee of professional bodies during the year.

Year	Name of teacher	Name of conference/ workshop attended for which financial support provided	Name of the professional body for which membership fee is provided	Amount of support
2017	Dr. Nishant Doshi	ICTCS 2017	-	22,307/-

2017	Dr Vishvesh J Badheka	70th IIW Annual Assembly and International Conference, Shanghai, China, Date- June 25-30, 2017	-	-
2017	Dr Vishvesh J Badheka	IIW Intl congress held at Chennai during 7-9 th Dec 2017	-	-
2017	Dr. Pavan Kumar G	--	ASME Membership fees	5,500/-
2017	Dr. Vinay Vakharia	8th International Conference on Mechanical and Aerospace Engineering ICMAE 2017	IEEE	1.9 Lakhs
2017	Dr. Nishant Doshi	Workshop on "Digital Era Tools for Teaching-Learning" at Nirma University	-	2,183/-
2017	Dr. Samir B. Patel	"International Conference on Energy, Communication, Data Analytics and Soft Computing (ICECDS 2017)"	-	14,019/-
2017	Dr. Nishant Doshi	-	IEEE, ACM and CSI	17,840/-
2017	Dr. Jigarkumar H Shah	-	IEEE membership, IEEE Circuits and Systems Society Membership, IEEE Signal Processing Society Membership, IEEE Systems, Man, and Cybernetics Society Membership	13,720/-
2017	Dr. Ganga Prasad Pandey	-	IEEE membership, IEEE Antenna and Propagation Society Membership, IEEE Microwave and Theory Techniques Society Membership	12,610/-
2017	Dr. Pravin Kodgire	ACS 254th Annual Meeting, at Washington DC, USA, Aug 2017	-	1,24,000/-

2017	Dr. Pravin Kodgire	6th International conference on energy research ICAER 2017, IIT Bombay, Maharashtra, DEC 2017	-	11,870/-
2017	Dr. Manish Kumar Sinha	7 th IWA-ASPIRE Conference 2017, Malaysia	-	70,000/-
2017	Mr. Anirban Dey	6th International conference on energy research ICAER 2017, IIT Bombay, Maharashtra, DEC 2017	-	12,000/-
2017	Dr H R Dhananjaya	8 th International Conference on Engineering Technology, Science and Management Innovation , New Delhi	Conference Info (Academic Science)	2,500/-
2017	Dr H R Dhananjaya	33 rd National Convention of Civil Engineers on Recent Advances in Structural Engineering, Ahmedabad	The Institution of Engineers (India), Gujarat State Centre	2,000/-
2017	Dr Manas Bhoi	Indian Geotechnical Conference 2017, IIT Guwahati	-	25,000/-
2017	Dr Manas Bhoi	Indo-Japan Workshop, 2017, IIT Guwahati	-	5,000/-
2017	Dr.M.B.Kiran	-	Project management Institute, Pennsylvania, U.S.A	10,000/-
2017	Mr. Kishan Fuse	-	The Indian Institute of Welding	9,750/-
2017	Mr. Kishan Fuse	Advanced Welding Equipment for Quality and Productivity Improvement, ITM, Baroda.	-	1,500/-
2017	Manoj Sahni	2nd International Conference on Recent Advances in Mathematical Sciences and Its Applications (RAMSA-2017)	NA	18,942/-
2017	Manoj Sahni	NIL	Society for Failure Analysis (SFA)	1,000/-
2017	Manoj Sahni	NIL	Indian Structural Integrity Society (InSIS)	5,500/-

2017	Dr. Kaushal Kishore	Workshop on 'Diesel and Petrol Price Rationalization'	Integrated Research and Action for Development (IRADe), New Delhi.	1,00,000/-
2017	Dr. Kaushal Kishore	Case Method Teaching Seminar	Harvard Business Publishing and Indian Institute of Management, Ahmedabad (IIM-A).	
2017	Dr. Chaitanya Vyas	2nd Asia-Pacific Conference on Managing Business Sustainability organized by Jaipuria Insti. of Management, on Dec. 15-17, 2017	None	2,000/-
2017	Dr. Harmik Vaishnav	National Conference sponsored by UGC on "Academic Excellence" at Nirma University on 4th & 5th March, 2017	NA	2,800/-
2017	Manoj K. Sahoo	International Conference on Representing the Self: Addressing Issues of Ethnicity and Identity across Domains; Holy Cross College, Agartala, Tripura		19,000/-
2017	Dr. Urmi Satyan	Representing the Self: Addressing the Issues of Ethnicity and Identity across domains. 9-10 November 2017 Agartala, Tripura	CPDA	20,000/- approximate
2017	Dr Nausheen Nizami	National Conference of AMITY university		12,000/-
2017	Dr Nausheen Nizami		Life member of The Indian Econometrics Society (TIES)	10,000/-
2017	Dr Nausheen Nizami	International Conference at ILO Headquarters, Geneva on 'Future of Work'	-	1,47,036/-
2017	Dr. S Venkata Krishnan	National Conference SEVENTY YEARS OF INDIA'S FOREIGN POLICY (Kolkata)	-	14,909/-
2018	Dr. Rajesh Patel	ECOS 2018 - the 31st International Conference on Efficiency, Cost, Optimization, Simulation and Environmental Impact of Energy Systems.	ECOS 2018	2,90,000/-

2018	Dr. Amit V. Sant	Power Electronics for Renewable Energy Systems and Power Quality Issues	Nirma University	1,500/-
2018	Dr. Anilkumar Markana	Indian Control Conference, IIT Kanpur	IIT Kanpur	25,000/-
2018	Dr. Jigarkumar H Shah	IEEE - 2018 International Conference on Electrical, Electronics, Computers, Communication, Mechanical and Computing (EECCMC), Priyadarshini Engineering College, Vellore, India	-	6,000/-
2018	Dr. Ganga Prasad Pandey	National Conference on Advance Material and Nanotechnology (AMN-2018)	-	13,171/-
2018	Dr. Jigarkumar H Shah	FDP on Internet of Things (IoT), MNIT, Jaipur	-	6,178/-
2018	Dr. Ganga Prasad Pandey	FDP on Internet of Things (IoT), MNIT, Jaipur	-	5,913/-
2018	Santosh Kumar Bharti	-	Computer Society of India (Life Member)	10,300/-
2018	Dr. Paawan Sharma	-	IEEE	5,600/-
2018	Dr. Paawan Sharma	TI E2E Live – Embedded Processing.	-	22,812/-
2018	Bharti Saini	International Conference on Sustainable Technologies for Intelligent Water Management, IIT Roorkee, February 16-19, 2018.	-	10,768/-
2018	D. Sarkar	20 th International Conference on Civil Engineering & Architecture, Berlin Germany	World Academy of Science & Technology	1,00,000/-
2018	Dr Manas Bhoi	Membership Fees	International Society of Soil Mechanics and Geotechnical Engineering (ISSMGE)	4,000/-

) Membership for 2018-2021	
2018	Ms. Rimpi Baro	Three day GRIHA V Training Programme	GRIHA	10,000/-
2018	Mr. Kishan Fuse	Design and Analysis of Experiments, Indian Statistical Institute, Kolkata, India	-	24,823/-
2018	Dr. M. B. Kiran	International Conference on Contemporary Design and Analysis of Manufacturing and Industrial Engineering Systems held at National Institute of Technology, Tiruchirappalli, India during 18-20 January 2018.	National Institute of Technology, Tiruchirappalli, India	44,525/-
2018	Dr. M. B. Kiran	1st International and 4th National International Conference on Reliability and Safety Engineering	Indian Institute of Information Technology, Jabalpur, India	37,599/-
2018	Dr. Nirendra M. Misra	Introduction to Gaussian: Theory and Practice	-	45,000/-
2018	Dr D Sriram	15th Session of UNCEPA Conducted by UN, Newyork USA April 2018		2,95,000/-
2018	Dr. Chaitanya Vyas	Workshop on Data Science using R, at PDPU	None	5,000/-
2018	Dr. Harmik Vaishnav	“5th International HR Conference on Rewiring HRM in a Globalized Workplace: Challenges of Diversity, Employment Relations and Skills” at K J Somaiya Institute of Management Studies and Research, Mumbai	NA	28,000/-

2018	Dr. Harmik Vaishnav	2018 – IXth International Conference on Business, Economics, Law, Language & Psychology (ICBELLP) & Research World International Conference on Arts, Education and Social Science (ICAES) Dubai , UAE	NA	2,25,000/-
2018	Dr M Venkat Ram Reddy	Middle East Association of Public Policy and Administration conference, held at American University in Cairo, Cairo, Egypt, during 26th Nov to 28th Nov 2018		87,000/-
2018	Dr.Anurag Srivastava	Administration in the Middle East at the American University in Cairo, Egypt paper presentation on “Promotion of Transparency in Public Service Delivery Through Aadhaar” November 26-28, 2018		1,30,000/-
2018	Dr.Anurag Srivastava	University of Engineering Science and Technology (UESTC), China paper presentation on “Smart Urban Mobility and Public Transportation: A perspective on India” November 30-2nd December 2018, China.		1,55,000/-
2018	Dr. Ashvin R. Dave	408th ICAF at Osaka Japan		1,95,337/-
2018	Manoj K. Sahoo	AMEPPA-2018, Cairo, Egypt- 7th Global Conference on Public Policy & Administration in Middle East		1,31,000/-
2018	Dr. Urmi Satyan	GNOSIS UGC approved Journal ISSN 2394 0131	Cpda For Annual Subscription Fees	3,000/-
2018	Dr Prashnta Panda	AMEPPA-2018, Cairo, Egypt- 7th Global Conference on Public Policy & Administration in Middle East		Total 3 Lakhs for both the conferences

2018	Dr Prashnta Panda	University of Engineering Science and Technology (UESTC), China		
2018	Dr. Urmi Satyan	WhatsApp Greetings- Liability or Responsibility: A Psychological Analysis. University of Mumbai		16,000/- APPROX
2018	Dr. Ashish B. Joshi	International Conference on Economics and Business Management, IASTEM	--	2,23,418/-
2018	Dr Nausheen Nizami	60th Annual Conference of Indian Society of Labour Economics	-	10,000/-
2018	Dr Nausheen Nizami	7th National Conference of Indian Health Economics Policy Association	-	13,265/-
2018	Dr. S Venkata Krishnan	All India Political Science Conference & International Conference on Aspiring India (Meerut)	-	9,577/-
2018	Dr. S Venkata Krishnan	International conference on North East India (Delhi)	-	10,918/-
2018	Dr. Neeta Sinha	Psychology and Psychiatry, Paris	-	2 Lakhs APPROX
2018	Dr. Neeta Sinha	Indian Association Of Applied Psychology, Pondicherry	-	23,000/-
2018	Dr. Neeta Sinha	International Conference on School Psychology, Vishakhapatnam	-	20,000/-

6.3.2 Number of professional development / administrative training programmes organized by the University for teaching and non-teaching staff during the year

Year	Title of the professional development programme organised for teaching staff	Title of the administrative training programme organised for non-teaching staff	Dates (from-to)	No. of participants (Teaching staff)	No. of participants (Non-teaching staff)
2018	Effective Academic Articulation	-	5 th , 6 th & 7 th June, 2017	29	-
2018	Discover your True Self	-	28 th & 29 th July, 2017	32	-
2018	Microsoft Excel -	-	4 th & 5 th August, 2017	32	3

	Advance Level				
2018	Personal Effectiveness & Leadership Program	-	1 st , 2 nd & 3 rd September, 2017	33	-
2018	Teaching with Technology – Weekend Workshop	-	8 th & 9 th September, 2017	25	-
2018	Teaching with Technology – Weekly Slots	-	25 th to 28 th September, 2017	79	-
2018		Developing as a Dynamic Professional	28 th & 29 th December, 2017	-	35

6.3.3 No. of teachers attending professional development programmes, viz., Orientation Programme, Refresher Course, Short Term Course, Faculty Development Programmes during the year

Title of the professional development programme	Number of teachers who attended	Date and Duration (from – to)
Faculty Orientation Programme , Organised by PDPU	7	10-22 July, 2017
Faculty development programme organized by Pandit Deendayal Petroleum University	4	10-22 July, 2017
Workshop on ‘Diesel and Petrol Price Rationalization’	1	30th August, 2017
Workshop on "Digital Era Tools for Teaching-Learning" at Nirma University	2	September 15-16, 2017
“Six Sigma Executive green belt by Henry Harvin” held at PDPU	1	22-25 Sep, 2017
Recent Advances in Electrical Power Systems , PDPU Gandhinagar	4	28-29 September, 2017
“Entrepreneurship Development” organized by International Centre for Entrepreneurship & Career Development at Ahmedabad	1	30 Oct to 11 Nov, 2017
Latex workshop , PDPU Gandhinagar	1	10 th November, 2017
GIAN Course # 171003L18 Welding Metallurgy and Weldability of Steels and Stainless Steels	01	11-15 Dec, 2017
Attended five days GIAN course on “Understanding Nanotechnology and Engineering Nanomaterials for Diverse Technological Applications” organized by NIT Trichy	01	18-22 Dec, 2017
Recent Computational Methods and its Application for Analysis and Optimization in Mechanical Engineering, VIIT Pune.	1	26-28 Dec, 2017

Industry Immersion Program 1.0, 2.0 and 3.0	8	1-6 Dec, 2017 26-29 Dec, 2017 29 Jan to 02 Feb, 2018
Attended five days training Course on “Environment Auditing Made Easy: Basics & Analytical Test Procedure”, organized by Gujarat Pollution Control Board in association with SVNIT, Surat	01	17-21January, 2018.
“Development of Chemical Engineering Thermodynamics Laboratory for Undergraduates” at IIT, Madras	1	22-27 Jan, 2018
Faculty Development Programme for Entrepreneurship Development	2	February, 2018
Power Electronics for Renewable Energy Systems and Power Quality Issues, Nirma University	4	17-18 February,2018
i4Happiness	2	19-24 February, 2018
Recent Trends in Renewable Energy Technology, Power Quality Enhancement and Electric Drives, PDPU Gandhinagar	4	8-9 March, 2018
Applications of Graph & Network in Computational Studies, Bioinformatics, Engineering And It’s Technical Terminology	1	12 – 14 March, 2018
<i>Indo-Australian Workshop on Advances in Materials and Additive Manufacturing</i>	1	21-22 March, 2018
VISSIM Software Training Workshop	03	2-3 April, 2018
Faculty Development Programme on Econometrics for Management Research	02	9-13April, 2018
Two Week GIAN Programme “Advanced Course on Sustainability in Materials and Design.	1	21 May to 01 June, 2018
Effective Academic Articulation, AMA Ahmedabad	50	5-7June, 2018
NPTEL workshop , GIT Gandhinagar	1	8 th June, 2018
Internet of Things (IoT), MNIT, Jaipur	2	18-22, June, 2018
Faculty Development Programme on Mathematical modelling for Research Problems.	1	25-29 June, 2018
Faculty Development Program Series on “Discover Your True Self”	18	28-29 July, 2018

6.3.4 Faculty and Staff recruitment (no. for permanent/fulltime recruitment):

Teaching		Non-teaching	
Permanent	Fulltime	Permanent	Fulltime
120	55	27	123

6.3.5 Welfare schemes for:

Teaching & Non-teaching

To enhance the professional development of teaching and non teaching staff following efforts has been made:

- CPDA (Cumulative Professional Development Allowance) of INR50000 to 100000 p.a. is provided to all faculties in a block of three years, to present their

research papers in National and International conferences, subscribing to research journals, membership in academic bodies and also for book purchase.

- Faculty are also nominated for prestigious conferences and training program, and also to accompany students for its International Exposure Program.
- Each faculty is given laptop/desktop and other IT facilities for education and research.
- Non-teaching staff is also deputed for training programmes relevant to their skill development.
- Rs.30,000/- per annum towards medical reimbursement (For Self and dependant family members) to all those who are on regular scale of pay.
- Rs.5,00,000/- medical insurance for Self and dependant family members for all faculty and staff members.
- Rs.5,00,000/- group personal accident insurance for all faculty and staff members.
- Rs.27,000/- per child (per annum) (for maximum two children) towards children education allowance to all those who are on regular scale of pay.
- Rs.12,000/- per annum towards telephone allowance
- Contributory Provident Fund @ 12% (of Pay + Grade Pay + DA) to all those who are on regular scale of pay and for the others as per the EPF Act, not limited to Rs 15000/- p.m. per employee.
- Leave Travel Concession for visit to Home town and Anywhere in India to all those who are on regular scale of pay as per GoI rules.
- Leave encashment as per Govt. of India norms for faculty on regular scale.
- Payment of Gratuity as per Gratuity Act.
- Subsidised housing facility in vicinity of the campus.

Students:

1. Students are encouraged to present papers abroad and in India, with financial support.
2. Opportunity for short term study visit to the foreign universities under International Exposure Programme as Summer Internship, with financial support.
3. Provision of seeing the evaluated answer books with the evaluating teacher
4. Scholarships to the extent of full tuition fee waiver, for B. Tech. students
5. Scholarships for M. Tech. students
6. Scholarships to Full Time Ph. D. students
7. Nationalised Bank on the campus
8. The medical centre with an Ambulance on campus (24*7)
9. Medical doctor available on all the week days.
 - i. Physician – 12 pm to 4 pm from Monday to Saturday
 - ii. Gynaecologist – 3 pm to 4 pm Monday, Wednesday & Saturday
 - iii. Psychologist – 3 pm to 4 pm on Tuesday
10. Full time students' psychological counsellor.
11. Women's cell, Students' clubs
12. Grievance Redressal under Dean-Students' Affairs
13. Lawn tennis Courts, Football courts, basketball courts, volleyball courts.
14. Cafeteria services at reasonable cost
15. 1 Gbps Internet Facility provided by BSNL, managed by NIC under MHRD scheme
16. 50 GB Wi-Fi facilities for students and faculties

6.4 Financial Management and Resource Mobilization

6.4.1 Institution conducts internal and external financial audits regularly (with in 100 words each)

The University follows two fold financial audit i.e. Financial Internal Audit by Chartered Accountant Agency and Financial External Audit by Chartered Accountant Agency. The internal audit is conducted @ 100% vouching of Books of Accounts of the University and its constituent schools. External audit is conducted @ 100% as far as expenditure & fee revenue is concerned. The University also mobilized revenue from Hostel Fee receipts and partial extension services to the allied industries towards Testing Service, Consultancy Services, MDP/Workshop/Conference Services etc.

6.4.2 Funds / Grants received from management, non-government bodies, individuals, philanthropies during the year (not covered in Criterion III)

Name of the non-government funding agencies/ individuals	Funds/ Grants received in Rs.	Purpose
RELIANCE FOUNDATION, Mumbai	15.00 Crores	Endowment Funds (Financial Year 2017-18)

6.4.2 Total corpus fund generated: Rs. 129.96 Crores as on 31.3.2018

6.5 Internal Quality Assurance System

6.5.1 Whether Academic and Administrative Audit (AAA) has been done?

Audit Type	External		Internal	
	Yes/No	Agency	Yes/No	Authority
Academic	No	--	Yes	Board of Studies
Administrative	Yes	Financial Audit	Yes	University office

6.5.2 What efforts are made by the University to promote autonomy in the affiliated/constituent colleges? (If applicable)

The University has its constituent Schools separately for its engg., management, and liberal studies programmes. All schools exercise its autonomy responsibly to decide its academic calendar, requirement of funds, and research and extension activities under the supervision of School Directors. Schools/ Departments update the syllabus or make innovations in teaching pedagogy, which is guided and monitored by the concerned Board of Studies and the Academic Council.

6.5.3 Activities and support from the Parent – Teacher Association

- Parents of the students are informed about the progress of their wards.
- Organizing Open House for guardians to discuss the progress, grievances or issues of students.
- The guardians are encouraged to understand the transparency of the system and involve themselves in tracking the academic performance of their wards.

6.5.4 Development programmes for support staff

- The support staff is encouraged to undertake various development courses from time to time to enhance their job competence. They are also provided facilities to undertake the courses found fit to cope up with the duties they are performing at the institute/ department to update their information level regularly with all this, they get more work exposure related training/demands or with the development in university/faculty facilities e.g. accounts, online admission, information systems, etc.
- Faculty Administrative Staff participates on regular basis for computer skills enhancement
- Training for online admission and examination process.
- Training for generating online students records for admission and evaluation purpose.

6.5.5 Post Accreditation initiative(s) (mention at least three)

- 10% in each course taught by industry professionals
- Capsule courses to enhance competency and employability quotient of students
- 10% seats for Girls in UG as per norms
- Earn While Learn
- Cash Prizes to rank holders
- Merit prizes at the end of every year for UG engineering students.
- Provision of scholarships for Diploma to Degree students.

6.5.6

- a. Submission of Data for AISHE portal : Yes
- b. Participation in NIRF : Yes
- c. ISO Certification : No
- d. NBA or any other quality audit : Yes – Applied

6.5.7 Number of Quality Initiatives undertaken during the year

Year	Name of quality initiative by IQAC	Date of conducting activity	Duration (from-----to-----)	Number of participants
2017-18	10% in each course is taught by the industry professionals.	2017-18	Odd July – Dec. Even semester January to Jun	Around 4000 students
2017-18	Admission network has been developed for admission of international students in particularly from SAARC, Arabian and African countries.	2017-18	Odd semester July to Dec.	Around 50 international students
2017-18	Faculties and other researchers have been directed to publish their papers in Scopus or Web of Science only, or in journals like ASME, Springer, IEEE, and such other journals of comparable quality.	2017-18	-	Around 200 faculty

CRITERION VII – INSTITUTIONAL VALUES AND BEST PRACTICES**7.1 - Institutional Values and Social Responsibilities**

7.1.1 Gender Equity (Number of gender equity promotion programmes organized by the institution during the year)

Title of the programme	Period (from-to)	Participants	
		Female	Male
Save Girl child	29 March 2018 to 1 st April 2018	Total 55	

7.1.2 Environmental Consciousness and Sustainability/Alternate Energy initiatives such as:

- One megawatt solar power station to demonstrate green and clean energy and to lower the energy dependence.
- Solar Research Development Centre
- Centre of Excellence for Biofuel and Bioenergy Studies
- Centre of Excellence for Geothermal Energy
- Glass windows and partitions for effective light and reducing electricity consumption.
- Rain water harvesting
- Paperless environment with extensive use of E-communication.
- Solar street lights across the campus.

Percentage of power requirement of the University met by the renewable energy sources:

Total Power consumption of the University	Consumption from renewable energy sources	%
PDPU Campus – 242700 Units	2750	1.13
UG Hostel – 49077 Units	Nil	Nil
High-rise Hostel – 73727 Units	Nil	Nil

7.1.3 Differently abled (Divyangjan) friendliness

Items Facilities	Yes/No	No. of Beneficiaries
Physical facilities	Yes	02
Provision for lift	Yes	02
Ramp/ Rails	Yes	02
Braille Software/facilities	No	--
Rest Rooms	Yes	02
Scribes for examination	Yes	02
Special skill development for differently abled students	Yes	02
Any other similar facility	Yes	02

7.1.4 Inclusion and Situatedness

Enlist most important initiatives taken to address locational advantages and disadvantages during the year

Year	Number of initiatives to address locational advantages and disadvantages	Number of initiatives taken to engage with and contribute to local community	Date and duration of the initiative	Name of the initiative	Issues addressed	Number of participating students and staff
2017	Community Intervention	One-month Rural Internship for all first year undergraduate students of PDPU. This has been in association with local NGOs in Gujarat.	November 2017 May 2018	December 2018 June 2018	Rural Education, Health and sanitation, safe energy, agriculture	Ms. Neeta Khurana Ms. Khushali Purohit
2017	PDPU is an active member here.	A Core team for 'Knowledge Corridor' is created which includes members of various educational institutes nearby to work inclusively for the betterment of local stakeholders.	June 2017	July 2017	Tree plantation took place near PDPU new high rise hostel blocks collectively by all educational institutes nearby. Issues Addressed – Promotion of environment protection, team work, pollution control, awareness for tree plantation.	GIDM / PDPU/GNLU/ISR /IHM PDPU student volunteers and faculty staff
2017	Street plays performed at all zones of Amdavad Municipal Corporation to create awareness for waste management. AMC sought support on	Awareness campaign launched by PDPU students at all zones of AMC. Local community in areas like Pirana/ Walled city/Nikol/	November 2017	December 2018	Issues Addressed – Solid Waste Management, Segregation of waste, Pollution control, health and hygiene.	460 students of Liberal Studies, PDPU. Dr. Anurag Srivastava Dr. Chaitanya Vyas Dr. Nausheen Nizami

	waste segregation and public-private partnership to create awareness.	Narol were suffering from air pollution and waste management . PDPU as a conscious social change agent joined hands with civic bodies to spread awareness on this.				Ms. Hetal Vasani Amdavad Municipal Corporation stakeholders.
2017	Promotion of renewable and clean energy	To cater to the energy needs locally as well as nationally	July 2017	June 2018	Geo Thermal Energy,	Centre of Excellence in Geo Thermal Energy, PDPU
2018	Child Rights Initiatives	Media monitoring in child rights, workshop for food bloggers on child rights on food and nutrition, sensitization of media on child rights issues, tweet hangout on child issues on International Children's Day	May 2018	June 2018	Child Rights	Prof Pradeep Mallik Centre of Child Rights Communication with UNICEF
	Food Preservation and Irradiation	For farmers in Banaskantha spreading awareness of nuclear irradiation for preservation of the crop of potatoes.			Clean energy Rural inclusivity Lab to Land	Prof. Chaitanya Ganguly, Ms. Neeta Khurana, Dr. Sitakanta Mishra, Ms, Khushali Purohit
2018	NSS activities	10	29 March	1 April 2018	1. Clean Village Campaign.	Dr. Milan Bhatt

			2019		<ol style="list-style-type: none"> 2. Cleaning public places. 3. Toilet construction awareness. 4. Distribution of hand-made dustbins. 5. Quality Education. 6. Save water awareness. 7. Teaching them about importance of a solar energy & Bio Gas plant. 8. Programmes at night (Drama, Plays, etc). 9. Tree plantations in the Ambapur School. 10. Solar energy, Bio Gas plant and various government schemes. 	55 students
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7.1.5 Human Values and Professional Ethics

Code of conduct (handbooks) for various stakeholders

Title	Date of Publication	Follow up (maximum 100 words each)
A) Academic conduct & discipline (for students)	2007	The discipline committee takes care of the cases of students violating the values and ethics

		as mentioned in the code.
B) Professional code of conduct (for employees)	2016	The HoD, School Director and the Head of Institution ensures the observance of professional code of conduct from the employees. The University follows student satisfaction serve for faculty.

7.1.6 Activities conducted for promotion of universal Values and Ethics

Activity	Duration (from-----to-----)	Number of participants
Elective papers in the curriculum of School of Petroleum Technology on Swami Vivekananda	Semester	First year Petroleum Engineering Students
Capsule Course on Global Citizenship	January	Minimum 30 students
Capsule Course on Happiness	September	Minimum 30 students
Leadership and Character Development Workshop by Lt. General Vinod Vasistha, Former DG of NCC India	April 6, 2018	600 NCC Cadets
Course on Conflict Resolution Through Non Violence: The Gandhian Model	July 10-August 10, 2017	33 International students from 16 countries
Celebration of 'Global Village' by AIESEC students	July 12, 2018 to August 24, 2018	International students from 20 different countries and PDPU students.

7.1.7 Initiatives taken by the institution to make the campus eco-friendly (at least five)

- One megawatt solar power station to demonstrate green and clean energy and to lower the energy dependence.
- Solar Research Development Centre
- Centre of Excellence for Biofuel and Bioenergy Studies
- Centre of Excellence for Geothermal Energy
- Glass windows and partitions for effective light and reducing electricity consumption.
- In winter, academic sessions are kept continuously without break as in winter less electricity supply for air conditions is required.
- Rain water harvesting
- Poster competition was organized on the theme of the use of green and clean energy to sensitize students for the respect for environment.
- Green Run – a marathon was conducted in Gandhinagar by PDPU students in 2012 to promote environment protection.

- University encourages use of bicycles for students to commute to nearby locations to reduce carbon footprints. University had bought bicycles and offers it on rental basis to students.
- Paperless environment is encouraged with extensive use of E-communication.
- Solar street lights have also been put up across the campus.

7.2 Best Practices

Describe at least two institutional best practices

- In UG Engg. programmes 10% supernumerary seats reserved for Girls.
In UG Liberal Studies programmes 50% seats reserved for girls.
- Financial assistance to weaker section students
- For Faculty :
 - ✓ Cumulative Professional Development allowance - 3 lakhs for a quarter of 3 years
 - ✓ Ph.D. deputation for Lecturers up to 3 yrs with full salary
- Financial Support to Students for:
 - ✓ International Paper Presentations
 - ✓ International Exposure Program
 - ✓ Research Projects
- Innovation and Incubation Cell
- Green initiatives
- Rural, Urban Renewal, Civic & Social Services Internships

At PDPU several innovative and ambitious initiatives and practices have been implemented. Of all such initiatives and practices, following two are worth mentioning:

Internships

Rural Internship: - This internship is intended to understand the socio-economic fabric of rural community in India, its grass root realities, problems and solutions. (Community driven initiatives like – adult education, women empowerment, health & hygiene). Rural internship equips students with basic understanding of rural sector and encourages students to work with NGOs for the welfare of the community. It also helps future business leaders in developing good insights of Indian rural markets.

Urban Internship: - This is intended to expose students of select programmes to Urban Renewal Mission Internship where students work with Municipal Corporation for one month for tasks related to Urban development. This experience provides them fresh perspectives on city administration and inculcates leadership values.

Corporate Internship: - The purpose of this internship is to gain real life exposure to

the demands and work pattern of the industry. The students work with sectors like – Energy, Oil and Gas, Infrastructure, Manufacturing, Event Management, Media, Films, Banking, Aviation Industry, Hospitality, NGOs, Government etc. This enables the students to complement theories learnt at the school and also network with industry.

International Exposure Program

This is not just for cross cultural understanding, but a well-structured academic programme to undergo in an international level institution abroad. IEP also helps understand the pattern of Higher Education abroad and globalculture. Students are encouraged to avail IEP with countries like Canada, US and Australia. This also facilitates students who are interested for study abroad as upward mobility in Higher Education.

Upload details of two best practices successfully implemented by the institution as per NAAC format in your institution website, provide the link.

7.3 Institutional Distinctiveness

Provide the details of the performance of the institution in one area distinctive to its vision, priority and thrust.

Provide the weblink of the institution in not more than 500 words.

i) **International Exposure Programme:**

Year	No. of students benefitted
2010-11	94
2012-13	47
2013-14	88
2014-15	76
2015-16	98
2016-17	112
2017-18	65
Total	580

ii) **Industry Connect Programme.**

iii) **Students Research Funding.**

iv) **Tuition fee waiver to the extent of full time for well performing students.**

v) **Professional Development Allowance to the faculty members at Rs.1.0 Lakh per year, with provision of carry forward to the quarter of three years.**

8. Future Plans of action for next academic year (500 words)

- To develop ERP system.
- To construct a one more academic block to house classrooms, laboratories required for the reason of new courses introduced.
- To attract more no. of high calibre PG Degree and Ph.D. students
- To increase the number of international admissions.
- To increase number of faculty members qualified from global institutions.
- To get published more no of peer reviewed research paper from faculty.

School of Liberal Studies

BA (Hons) in Literature and Communication

1. **Domain experts:** Possess breadth and depth of knowledge in their chosen discipline(s) and have a good degree of discipline-specific skills and competencies.
2. Possess entrepreneurial spirit: They develop the attitude to take up an assignment in the spirit of entrepreneurship: not averse to taking calculated risk and looking forward to reap the benefits of their endeavor.
3. **Intellectually autonomous and honest:** They will be able to work independently in a way that is informed by openness, curiosity and a desire to meet new challenges; they develop into independent learners who take responsibility for their own learning, goals and evaluate their own performance.
4. **Team workers:** They are at ease with engaging with scholarly community individually and in team; well trained in working in groups of varying sizes, they conduct themselves professionally in a team and other collaborative contexts.
5. **Ethical on professional fronts:** They appreciate professional values and understand that as a responsible professional as well as a responsible member of society it is important to stick to them.
6. **Critical thinkers/ questioning skills:** They identify and assess complex issues, exercise critical judgment in evaluating sources of information, and apply imaginative and innovative thinking to problem solving.
7. **Effective communicators:** They are articulate, present their ideas in high quality written and spoken English; be able to use appropriate communication technologies. They are also good listeners and negotiate effectively with others.

B.Com. (Hons)

1. To develop analytical skill of commerce graduate to understand global trade
2. To integrate corporate internship in curriculum to provide field exposure to commerce graduate
3. To develop comprehensive understanding of business feasibility in the era of E-commerce and E-governance.
4. Aptitude to understand changes in macro and micro business environment
5. Trans-disciplinary understanding
6. Contemporary relevance with global perspective
7. Well rounded holistic personality
8. In-depth exploration of interdisciplinary researches

B.B.A. (Hons)

1. To improve critical, analytical and logical skill of students for comprehensive understanding of problems pertaining to management of the organization.
2. To integrate corporate internship in curriculum to provide field exposure to business graduate
3. To enhance competency of business graduate to make them suitable for national and global employments.
4. To develop skill for better understanding of business feasibility on e-platform.
5. Aptitude to understand changes in macro and micro business environment
6. In-depth understanding of E-Commerce on local and global markets.
7. Trans-disciplinary understanding
8. Contemporary relevance with global perspective
9. Well rounded holistic personality
10. In-depth exploration of interdisciplinary researches

School of Petroleum Management

MBA (Energy & Infrastructure) and MBA (General Management)

1. Demonstrate language skills, Oral communication skills, Knowledge of foundational subjects for management studies, An awareness of ethical understanding
2. Enhance I.T./Computing Skills.
3. Learning the basics of Energy & Infrastructure Business* and Industry & Business.
4. Enable to understand relevance of context in general business/Energy & Infrastructure business.
5. Develop social consciousness, critical thinking skills
6. Promote interpersonal awareness and ability to work in groups
7. Enabling to apply acquired communication skills in effective business writing including E-mails/Social Media.
8. Develop competence in quantitative analysis including Business Analytics.
9. Understanding applied aspects of technology relevant for business.
10. Prepare business leaders with a sound understanding of ethics.

**Particularly for MBA (E&I)*

School of Petroleum Technology

B.Tech. (Petroleum Engg.)

1. Be practical, employable and qualified petroleum engineers, who effectively solve problems and design new processes and workflows in the oil and gas production and services industries or other similar pursuits.
2. Serve society by encouraging the ideals of ethical behavior, professionalism, and environmentally responsible use of natural resources.
3. An ability to design and conduct experiments, as well as to analyze and interpret data.
4. Keep their education up to date through self-instruction and other training.

M.Tech. (Petroleum Engg.)

1. Have in depth knowledge within one of the technology areas drilling, production or reservoir engineering.
2. Provides tools for analysis and computation, and have ability to evaluate their usefulness and limitations.
3. Be able to contribute to planning for field development and operation, and to impact studies of petroleum fields.
4. Be able to make plans for drilling of onshore and offshore wells, for recovery of oil and gas from different types of reservoirs, or design and operation of production and injection wells, including processing on the seafloor and with use of permanent installations.
5. Be able to apply knowledge and skills within petroleum engineering in a social economic, environmentally friendly and safe perspective throughout field life.

School of Technology**B.Tech. (Electrical Engg.)**

1. Enable graduates to obtain the knowledge and skills necessary for immediate employment and continued advancement in the field of Electrical Engineering.
2. Students will possess a strong technical background as well as analytical, critical-thinking, and problem-solving skills that enable them to excel as professionals contributing to a variety of Engineering roles within the various fields of Electrical Engineering and the high-tech industry.
3. To understand the impact of Engineering solutions in a global, economic, environmental, and societal context.
4. To get knowledge of Design, analysis, operation, control, protection, and simulation of electrical power systems (Generation, Transmission, Distribution & Utilization).
5. Knowledge of principles of operation, design, performance and testing of static and rotating machines and power electronics based electric drives.
6. An ability to use the techniques, skills, and modern engineering tools necessary for engineering practice.
7. Students will be committed to professional development and lifelong learning by engaging in professional or graduate education in order to stay current in their field and achieve continued professional growth.

B.Tech. (Mechanical Engg.)

1. **Engineering knowledge:** An ability to apply knowledge of mathematics, science, and engineering in solving/analyzing problems in industries, research and development institutions, public sector units, higher education and in academia.
2. **Problem Analysis:** An ability to design and conduct experiments, as well as to analyze and interpret data in mechanical engineering theory and practice at various industrial work-places.
3. **Design/ Development of solutions:** An ability to design a system, component, or process to meet desired needs within realistic constraints such as economic, environmental, health and safety, manufacturability, and sustainability.
4. **Multidisciplinary Approach:** An ability to function on multidisciplinary teams.
5. **Modern tool usage:** An ability to identify, formulate, and solve engineering problems using modern tools and techniques.
6. **Communication:** An ability to communicate effectively.
7. **The Engineer and Society:** The broad education necessary to understand the impact of mechanical engineering solutions in a local, global, economic, environmental, and societal context.
8. **Life-long learning:** A recognition of the need for, and an ability to engage in life-long learning.
9. **Investigations of complex problem:** Use of Applied research including design of experiments, analysis and interpretation of data, synthesis of the information to provide valid solutions with the knowledge of contemporary issues.
10. **Project Management:** An ability to apply engineering knowledge and management principles skills to manage engineering projects.
11. **Environment and Sustainability:** An ability to design sub-systems, systems, components and processes to fulfil demand of environmental sustainability.
12. **Ethics:** Apply engineering principles toward the professional values and ethics.

B.Tech. (Civil Engg.)

1. The graduates will be able to design a system, component, or process to meet desired needs within realistic constraints such as economic, environmental, social, political, ethical, health and safety, manufacturability and sustainability.
2. The graduates will come to know the application of modern tools such as different computer software, modern instrumentation for understanding the limitations of engineering activities and also for the modeling and design of engineering systems.
3. The graduates will be able to understand the professional and ethical responsibility. The graduates will come to know recognition of need for, and an ability to engage in, life-long learning.
4. The graduates will be able to make effective communication in oral, written, graphical forms with confidence.
5. Students will committed to professional development and lifelong learning by engaging in professional or graduate education in order to stay current in their field and achieve continued professional growth.

B.Tech. (Chemical Engg.)

1. The ability to identify, formulate and solve Chemical Engg. problems
2. Work collaboratively in multidisciplinary teams to tackle complex multifaceted problems that may require different approaches and viewpoints to arrive at a successful solution.
3. Pursue careers in chemical engineering and related fields as demonstrated by professional success at positions within industry, government, or academia.
4. Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modelling to complex engineering activities with an understanding of the limitations.
5. An ability to design systems, components, or processes to meet desired needs within realistic constraints (such as economic, environmental, social, political, ethical, health, safety, and sustainability)

B.Tech. (Information & Communication Technology)

1. Be able to apply, model, analyse and solve the engineering problems using knowledge of Science, Technology, Engineering and Mathematics.
2. Be able to design solutions, products and systems to meet specified needs of society and industry.
3. Be aware of and be able to use state-of-the-art tools, standards and technology.
4. Be able to appreciate and span multidisciplinary domains.
5. An ability to design systems, components, or processes to meet desired needs within realistic constraints (such as economic, environmental, social, political, ethical, health, safety, and sustainability)

B.Tech. (Computer Engg.)

1. Successfully practice computer engineering to serve state and regional industries, government agencies, or national and international industries.
2. Work professionally in one or more of the following areas: computer hardware and software design, embedded systems, computer networks and security, system integration, and electronic design automation.
3. Achieve personal and professional success with awareness and commitment to their ethical and social responsibilities, both as individuals and in team environments.
4. Maintain and improve their technical competence through lifelong learning, including entering and succeeding in an advanced degree program in a field such as engineering, science, or business.
5. Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.

M.Tech. (Mechanical Engg.(Thermal))

1. To apply the concepts of material science and engineering, computer aided engineering, thermal engineering and manufacturing technologies for design, development, analysis and maintenance of mechanical systems and processes.
2. An ability to design systems, components, or processes to meet desired needs within realistic constraints (such as economic, environmental, social, political, ethical, health, safety, and sustainability)
3. Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.

M.Tech. (Electrical Engg. (Power system))

1. Demonstrate dexterity in the domains of Electrical Engineering viz. network analysis, control systems, electrical machines, electronics and electrical power systems.
2. Understand specifications and requirements, apply laws, analyze, simulate circuits, interpret results and design appropriate solutions in various areas of electrical engineering with evident validation.
3. Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.

M.Tech. (Civil Engg. (Infrastructure Engg. & Management))

1. Apply principles of Civil Engineering to propose application-centric Solutions utilizing modern tools and techniques
2. Plan, Design and Construct Sustainable Infrastructure satisfying Economic, Environmental, Social, Ethical and Safety Constraints
3. Communicate effectively with Stakeholders and add values to multi-disciplinary domains in addition to Civil Engineering.
4. Maintain and improve their technical competence through lifelong learning, including entering and succeeding in an advanced degree program in a field such as engineering, science, or business.

M.Tech. (Environmental Engg.)

1. To understand the impact of engineering solutions in a global, economic, environmental, and societal context.
2. To train the students on developing practical, efficient and cost effective solutions on problems and challenges on environmental sciences and engineering.
3. To inculcate among students sensitivity towards social and corporate responsibilities.
4. Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.

M.Tech. (Chemical Engg.)

1. An ability to model, simulate and validate the chemical engineering problems
2. An ability to design or develop chemical processes incorporating impact of economic, environmental, social, health, safety and sustainability
3. An ability to practice or apply chemical engineering principles, communication and other skills in a wide range of industrial and professional employment areas.
4. Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.

M.Tech. (Nuclear Science and Technology)

1. Explore the innovative field of Nuclear Science & Technology.
2. Provide Trained Engineers for construction, operation of the Nuclear reactors and support facilities
3. To train the students on developing practical, efficient and cost effective solutions on problems and challenges Nuclear sciences and engineering.
4. Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.

M.Tech. (Energy Systems (Focused on Solar Energy))

1. To prepare the students for successful career in the energy industry; energy regulation and management agencies; and in the academic and R&D institutions.
2. To produce graduates strong in energy resources, technologies and management fundamentals, and capable in addressing the present and potential future energy problems.
3. To produce energy professionals, who are sensitive to, and well aware of, the energy issues and concerns, and who can apply their specialized knowledge for the sustainable energy management.
4. Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.